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THE

MEDICAL AND PHYSICAL

JOURNAL.

CONDUCTED BY

SAMUEL FOTHERGILL, M.D.

PHYSICIAN EXTRAORDINARY TO HIS ROYAL HIGHNESS THE DUKE OF KENT; PHYSICIAN TO THE ASYLUM FOR FEMALE ORPHANS; AND TO THE WESTMINSTER GENERAL, AND THE WESTERN, DISPENSARIES.

VOL. XXXII.

FROM JULY TO DECEMBER, 1814.

BIBLIOTHECA BODLEIANA

Et quoniam variant morbi, variabimus artes;
Mille mali species, mille salutis erunt.

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"For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly "Journals; and there never existed any work to which the faculty in "EUROPE and AMERICA were under deeper obligations than to the "Medical and Physical Journal of London, now forming a long, but an "invaluable series."—RUSH.

For the Medical and Physical Journal.

Remarks upon an "Amended Bill" for regulating Mad-houses; by DR. HARRISON.

I HAD an opportunity this evening to peruse an "amended bill" lately introduced into the House of Commons, and which will doubtless soon become an act of the legislature, unless its progress be arrested by the active and spirited co-operation of the medical faculty in all parts of the island. It is denominated a "Bill to repeal an Act made in the 14th year of his present Majesty, for regulating Mad-houses, and for making other Provisions and Regulations in lieu thereof."

To me it appears to be more a bill to extend the power, and augment the revenues, of the Royal College of Physicians, London, than to promote the comfort or contribute to the recovery of insane persons. It is on this ground that I wish to call the attention of your numerous readers to the subject and provisions of the intended enactment. Under it the College are alone to possess the right of granting licenses to keepers of lunatic institutions "in the cities of London and Westminster, and within seven miles of the same, and within the county of Middlesex." They are moreover to be the only visitors of lunatic asylums in the above districts. Here then is a source of great power to the College of Physicians in the vicinity of the capital, and which is deserving of attentive consideration from the metropolitan faculty. In other parts of England the licenses are to be granted by justices at quarter sessions, but an account of them must be forwarded to the Royal College; and the

keepers of lunatic asylums are directed under heavy penalties speedily to transmit to the College the names of all insane persons committed to their care.

It will be seen, on perusal of the bill, that the College will derive great influence from it in various ways, and in every part of England. This increase of authority I view with alarm, constituted as the College now is, and could wish to hear that preparations are making to exhibit the College as it is really constituted, at the bar of the House of Commons, that the public may be no longer amused with sounding titles. It will be seen, 1st, on examining the bill, that the College as a body, and some of its members, will individually derive considerable emolument under the act. This they will do by the issue of annual licenses to keep houses for lunatics. These vary from 10*l.* to more than 60*l.*, each arising according to the number of inmates. They are moreover to receive two weeks pay from every lunatic patient, and also two weeks salary from all keepers of lunatic houses; and in every succeeding year a moiety of the above sums. They are likewise to receive a moiety of all penalties incurred under this act in London, Westminster, and the county of Middlesex. Now when we consider the amount of licenses issued, the number of lunatics lodged in asylums, and the quantity of keepers employed, the aggregate revenue to the College obtained in this way will amount to a very large sum indeed.

2dly, Nor have they been unmindful of power in the new bill. The jurisdiction of the College is to be extended under it to a greater distance round the cities of London and Westminster than formerly, besides which it is to comprehend the whole county of Middlesex. With a view to increased power, the visiting physicians of all lunatic abodes must be graduates of the English universities, or licensed to practise physic by the College of Physicians. Still further to promote the same object, "no keeper of any house, &c. shall admit any lunatic without a written certificate of some physician, being a graduate of Oxford or Cambridge, or licensed by the College of Physicians in London, or a member of the College of Surgeons in London, or of the Society of Apothecaries in London actually practising as an apothecary." In designating the medical men who are to visit lunatic institutions, and to grant licenses of admission to patients, the College has insidiously contrived to serve its own body and the other incorporations, to the exclusion of every other practitioner. In the former act, all physicians, surgeons, and apothecaries could grant licenses of admission, and certainly no good reason can now be given for excluding them,

them, in favour of doctors and bachelors of medicine, whose education has been conducted in universities notoriously destitute of medical instruction. Hitherto an apprenticeship to pharmacy has been deemed a sufficient education for apothecaries, though certainly it is quite inadequate to form the modern apothecary, or general practitioner. Nor must the uninformed be deceived by the examinations at Apothecaries' Hall, which are always purely pharmaceutical, and therefore should not entitle its members to any preference over their unadmitted brethren as medical practitioners. The exception appears partial and illiberal. In London the faculty may have private inducements to enter the corporate bodies; in the provinces no additional advantages being derived from admission, they have been so much neglected, that many counties do not contain a single fellow or licentiate of the College of Physicians, or a member of the Company of Apothecaries, to carry the provisions of the intended act into effect. In such cases, what can be done? Is a visiting physician to be sent down from the Royal College, and are the lunatics to be transported into other counties, or even to London, to obtain the required certificates?

It is obvious that these restrictive clauses cannot be carried into effect without incurring in many instances an enormous expense, and great public inconvenience. Some of the brightest luminaries in medicine will be disqualified, and consequently degraded, by the discrimination attempted in the bill. It is invidious to select living characters, but it may not be irrelevant to state, that those celebrated physicians Perceval, Currie, and Poultney, would have been disqualified under the act; and yet it may be presumed that neither the late nor present president of the Royal College would venture to dispute with any of them for medical pre-eminence. The graduates of Edinburgh, Glasgow, &c. will be deprived of valuable privileges conferred upon them by their respective universities; and believing as I do that other encroachments are meditated upon the rights of the profession of every order, if the agitated measure be successful, I recommend it to all classes of the faculty to oppose the first endeavour.

In support of my opinion, it will be sufficient to call to the attention of my readers the bill for reforming medical practice, which was circulated some years since by the College, and which is commonly imputed to the gentleman now at the head of this ancient corporation. Should the present effort be crowned with success, the rising faculty will be led to enter freely into their respective corporations, to qualify themselves to discharge the lucrative offices appointed in the

bill. By these means the medical corporations will be gradually extended over the imperial dominions, without undergoing the regulations and improvements which the honor of the profession and responsibility of its members render indispensably necessary. I anxiously wish, for the credit of medical men, and good of society, that the curative art and its various members were placed on the high ground which their laborious avocations and important duties obviously deserve. The termination of war will afford greater leisure to examine our social and domestic establishments. Among these it is to be hoped that the very dangerous state of medical practice will soon obtain its full share of public attention. Let the faculty of every description immediately associate in London on liberal principles, and by uniting their interests with the country practitioners, draw forth an overwhelming opposition to the present bill, partly to defeat the meditated encroachments, partly to substitute measures useful, honourable, and advantageous to the faculty and their employers. C. HARRISON, M.D.

May 22, 1814.

P.S.—In the hasty perusal of the bill alluded to, I am aware that several circumstances important to the public and medical men, remain unnoticed by me. Some of the clauses affecting keepers and medical attendants upon lunatic asylums are, in my estimation, peculiarly objectionable; but I have, at present, no leisure to lengthen the inquiry. An early insertion of the "amended bill" would, I conceive, be an acceptable compliment to your readers.

For the Medical and Physical Journal.

Remarks on a Bill for repealing the Act relative to Lunatics now in force, and substituting another in its stead.

I TAKE the liberty of submitting to the public, through your means, a few remarks on a bill which has been lately brought into parliament, by Mr. Rose, for the purpose of repealing the act relative to lunatics at present in force, and substituting another in its stead.

The licensing and inspection of private lunatic hospitals in London and its environs, and in Middlesex, attach to five commissioners, annually chosen from the College of Physicians. In other parts of England, the licenses are granted by the quarter sessions of the peace, and the inspection takes place by a board, annually appointed by such quarter sessions, consisting of two magistrates and one physician. The general provisions are very much the same in both acts, and

and are enforced by appropriate penalties. But there are a few alterations in the present bill, one of which is of particular importance, viz. that persons having one lunatic only confined in a house, must give in to the commissioners the name of such individual, who becomes, after a certain period, liable to inspection, from which he is at present free. The other alterations are upon the whole improvements, though perhaps not to the practical extent which may at first view be imagined.

But there are some points in this bill which give it a much more leading and prominent characteristic than any which concern the patient. By the act at present in force, houses which do not contain more than one, and not exceeding ten persons, pay 10*l.* per annum for their license; and all which contain above ten, pay 15*l.* per annum, with a fee, in both cases, of 6*s.* 8*d.* to the secretary. This fund is placed under the charge of the treasurer of the College of Physicians, who is out of it to pay one guinea for each visitation, to each of the commissioners who may attend it, three of them being a quorum; and who is also to defray the other expences of such visitation, and to pay to the secretary such an allowance for his trouble as may be determined by the commissioners. The same general plan is pursued in the country, the clerk of the peace being secretary and treasurer.

Now I beg you to remark the alterations proposed in the present bill. Instead of paying a sum, which never exceeds 15*l.* per annum, for their license, the keepers of lunatic houses must pay 10*l.* per annum for every number above 1, and below 10, and 5*l.* for every additional 10 up to 100, and then 5*l.* for every additional 20; parish poor being chargeable with one-half of the sum here stated. Hence, if it is supposed that the lunatic houses in London and its neighbourhood average 60 patients each, which I presume is not an immoderate average, then the keeper must pay 40*l.* for his license instead of 15*l.* But this is not all: every keeper of a lunatic house, under the penalty of 100*l.* and the forfeiture of his license, is required to transmit, with the other notices, to the Secretary of the Commissioners, three days after a patient's admission, an account of "the weekly, or other stipend or payment" to be made to him for the maintenance of every such patient; in order that he may pay, to the College of Physicians, "such sum of money as the annual or other pay or stipend agreed to be paid to such keeper or keepers for the care and maintenance of every patient to be received therein, shall amount unto for two weeks." By this means, every lunatic house keeper, besides paying for his licence almost three times the annual sum

which

which he has heretofore done, must actually be charged to the College, for the use of that body, and the payment of the expences of the commission, the 1-26th part of the gross sum received by him in the course of his business, without any reference to his profit. This supposes that a patient may be in a lunatic house a whole year; but, as the clause is worded, it will even require a fortnight's pay, or stipend, for however short a period he may be so confined. At the probable amount of this tax it is very difficult to guess; but if you take the number 60 as an average, and suppose that 40 of those are patients who pay 10*s.* 6*d.* per week, and the remainder, patients who average a payment of 1½ guinea per week, (which I take it is a very low average, since there are many who pay from that sum up to 10 guineas,) it will follow, that 105*l.* must be annually paid for 60 patients; which, when added to the sum charged for a license, produces the enormous increase of 120*l.* instead of 15*l.* per annum, the whole present expences. But this sum, great as it is, does not take into account the fortnight's expence of all such as are for a short period only confined in a lunatic house, and of such as are in separate houses, and who must therefore pay, as is above stated, not only separate license fees of 10*l.* but a fortnight's amount of whatever their pay or other stipend may be.

It does not appear that any case has been made out, or even attempted to be made out, for such a serious tax upon lunatics; for it is clear that it is by lunatics or their friends, and not by the keepers of houses, that this tax must eventually be paid. The preamble to the bill states, that the existing act has been found insufficient for the purposes intended by it, without in any way pointing out its insufficiency, or offering against it any ground of complaint. And yet it is difficult to conceive what practical purpose the present bill, if made into a law, will more effectually answer than the former one, except the augmenting, in a most extraordinary degree, the expences attending it, for the benefit of a private corporation. The business of the existing act has been done, for 40 years, at its present rate, and a moderate augmentation to the fees of the commissioners, and to the license money which is to defray them, is very proper; for the labourer is worthy of his hire; and there is no class of men more distinguished for liberality in the practice of their profession, than are physicians. But Mr. Rose's bill has an evident tendency to throw a slur upon that part of the body of physicians (a small one only) which is to reap the pecuniary advantages of the enactments provided by it: for it conveys the degrading idea, that, in the performance

of a public duty entrusted to them by the legislature, those gentlemen, contrary to what I am sure is the fact, are principally actuated by motives of pecuniary advantage.

I have looked in vain into the new bill for any check upon the proceedings of the commissioners. The bill provides, that the magistrate and physician who are to act as the inspecting committee in the country, are to take minutes of their proceedings, which shall be entered in a register, and that such register shall be open to inspection, at all seasonable hours, at the office of the Clerk of the Peace; but from any such inspection the records of the London Commissioners are to be free: and the very small portion of publicity which the existing act gives to any matter of reprehension, by requiring that the minute relative to it should be hung up in the Censor's room of the College, is not provided for at all in the present bill. But there is one other point to which I must beg to draw your attention in the present bill; it is this, that the framer of it, by a side wind, attempts to bring every country physician within the pale and jurisdiction of the College of Physicians of London, and thus to increase the powers and emoluments of that body: for he makes it necessary, that in order to be an inspecting physician, and even to be able to sign a certificate of a patient's insanity, a circumstance of continual occurrence, a physician must have been previously examined and approved by the College of Physicians, unless he should have been a graduate of Oxford and Cambridge. Now it must be admitted, that, though Oxford and Cambridge deservedly possess high reputation as seminaries of general literature and science, they have no pretensions whatever, as medical schools; and hence it is, that 19 in 20 of the country practitioners, and most of those in London, have obtained their education in other universities, and particularly in that of Edinburgh. Many of our provincial physicians are, and have been, among the most eminent practitioners of this country, without being connected with the College; and considering how much better education, both general and professional, is at present than formerly, considering likewise that this law, though it has existed for nearly 300 years, has never been enforced, if indeed it is now any thing else than a dead letter, it seems to be very singular that an attempt should at this time be made, to give such a law action, by indirect means.

If it is thought proper to make country physicians amenable to the College of Physicians of London, instead of being satisfied with the discipline of the universities where they may have taken their degrees, why should this not be proposed to the legislature in the form of a statute, instead of being foisted into a bill for a very different purpose?

I trust

I trust that these remarks will receive attention from the professional public, particularly country physicians. Such a bill as is the proposed one, is hardly likely to pass; but if it succeed in advancing to another stage in the House, those gentlemen would do well to petition against it, from different districts. X. Y. Z.

For the Medical and Physical Journal.

Case of Compression of the Brain; by Mr. JOHN BERNARD.

ROBERT M'CULLUM, æt. 20, November 17th, 1813, in the act of reefing the topsails in a gale of wind at sea, fell from the foretop, and jammed his head with great violence between the gunnels of the forecastle, which intercepted his descent into the water. He was brought down senseless, with two large contused wounds. His head was shaved, and one was apparent over the right orbital process of the frontal bone, extending in a direction upwards, and obliquely, near the cavity formed by the zygomatic process; another on the occipital bone, near the lambdoidal suture. The first wound being considerably enlarged, the pericranium was found detached, and a fracture of about an inch, with a slight depression, was seen; in the other wound I discovered no fracture, but found the pericranium slightly detached.

The man talked incoherently; his pulse was hard and elastic; his skin soon became hot, and he vomited frequently. The hour was about eleven at night, and the brig rolling under the influence of a heavy gale of wind. I contented myself with taking 20 oz. of blood from his arm; when I enlarged the wound, I divided the temporal artery, which then yielded about four ounces. He spent a bad night, slept very little, talked wildly, had frequent vomiting, and two very severe shivering fits; towards morning these symptoms remitted. He was now blooded again, and I should have removed the fractured part, but that the brig rolled and pitched so excessively, as to render a steady position a precarious expectation, exclusive of the symptoms of compression not being very urgent. His pulse was very hard, skin dry, and constricted; he vomited frequently, complained very much of his head, had no sound sleep, and raved with the greatest wildness whenever he dozed; when he was roused, he answered questions rationally, but soon relapsed into a comatose state. He got a purgative enema, which produced two or three motions, and in the evening was let blood again. During night, symptoms of compression became more manifest, and towards morning he had two severe rigors; his vomiting increased, as well as lethargic stupor.

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The wound having the appearance of the letter V, I made an incision in that direction, and with a large trephine removed the fractured part. In making the incision, I divided part of the temporal muscle. He was blooded again, dressed superficially with lint, and a purgative enema administered. During the night he was restless, and complained of his head; but towards morning his pulse became more regular, skin cool, and a gentle diaphoresis broke out; he got at night five grains of calomel, with three of the antimonial powder. On the night of the 21st, he complained of a renewed pain in his head; the wound was dry, the edges of the cutis were loose, flabby, and seemingly detached from the muscles, and altogether the sore bore a very unhealthy aspect; his pulse was quick, and skin very dry. I consulted another surgeon who was in a ship in company, at whose recommendation I took 16 oz. of blood more from the man's arm, which gave him a little ease; but on coming to see him in about half an hour after, I found that having got up to be purged, he fell into a state of deliquium; the lower jaw had fallen, and not feeling any pulsation in his arm, I thought him dying; but on being replaced in bed, and pouring in a little wine, his pulse returned, and he revived. During the night he became restless, but as the morning succeeded all those symptoms remitted. From this period until the 24th, he was under the influence of a hectic fever, and his wound, after excessive suppuration about the scalp and temporal muscle, was assuming an healthy aspect, when a luxuriant fungus of brain shooting through the space vacated by the trephine, induced a severe giddiness and vomiting. I touched it with the argent. nitrat. but on the following morning it rose so considerably, that I was obliged to remove it with a scalpel, and fill up the part with a gradual compression of lint. From this period granulations took place; he met with no unfavourable symptom of much consequence, and though his convalescence was tedious, owing to debility, yet he has now resumed his usual state of health. The wound over the occipital bone healed without any trouble.

Remarks.—This case seems to me to be important for three reasons: 1st, The trephine was not applied for 36 hours after the accident; 2dly, A great debility and hectic fever ensued, the symptoms of which were not in the beginning manifest, and were confounded with those of inflammation; and, 3dly, A luxurious fungus of brain, of considerable size, was cut off.

JOHN BERNARD,
Surgeon of H. M. Sloop the Pelorus.

For the Medical and Physical Journal.

New Pharmacopœia; by Mr. RICHARD WALKER, of Oxford.

THE following remarks, although but lately committed to paper, presented themselves to me on looking over the last or present London Pharmacopœia, published in 1809. I offer them to public notice with due deference to the high authority from whence the subject that caused them came, and likewise with much diffidence on my own part, cherishing a hope, however, that at least some of these observations, particularly those respecting *weights and measures*, and likewise the *table of doses for different ages*, which I have constructed, may be found not unworthy of attention.

Oxford, RICHARD WALKER.
May 9, 1814.

THE indispensable necessity of applying *new names* to *old medicines* successively, in consequence of the progressive improvement in chemistry, has been a source of considerable inconvenience to the scientific practitioner, and of great perplexity and error amongst compounders of medicines, whose want of sufficient knowledge in chemistry might unqualify them for readily reverting to the chemical elements of which a medicine is composed; and whose deficiency in education, if any such there be, may not have prepared them for comprehending the *rationale* of the names assigned to certain articles founded on their chemical composition.

It were to have been wished that in the present improved, or rather perfect and settled state of medical chemistry, the New London Pharmacopœia of 1809 would have exhibited names, in all instances, perfectly indicative of the chemical compositions to which they were assigned, and consequently have afforded some chance of their remaining permanent or fixed.

It is to be regretted, however, that among other reasons, it has been found necessary to keep in view the probable errors which might arise from ignorance or inattention in the compounders of medicines: hence, in several instances where it is allowed it might have been done, it has been judged prudent to depart from this principle, lest a too great similarity of names in certain chemical medicines differing so widely in their qualities as to produce very serious consequences, if mistaken one for the other, should ensue from it in practice.

Thus it is declared that hydrargyri submurias, the new name assigned to what was formerly called *calomel*, should, according to its chemical elements, have been denominated hydrargyrus

hydrargyrus muriatus; but this has been dispensed with, lest in practice it should be confounded with the hydrargyrus muriatus (corrosive sublimate) of the preceding Pharmacopœia; and it is likewise admitted that the term hydrargyri oxymurias is not strictly applicable to the substance formerly known by the name of *corrosive sublimate*.

The exact component or constituent principles of these two mercurial salts, in every particular, seems, even at this time, not clearly defined; but enough, I apprehend, is known respecting them in order to assign a correct, permanent, and distinctive name to each, viz. that the latter (corrosive sublimate) is an oxydated muriate of mercury, and the other (calomel) relatively to that, a sub-oxydated muriate of mercury.

Moreover, the ammonia præparata of the Pharmacopœia of 1787, is, in the present Pharmacopœia, denominated indiscriminately, in some places, carbonate of ammonia, and in others, subcarbonate of ammonia; it is true, that this salt is not ordinarily obtained in a perfectly neutralised state, but one name or other should be adhered to; the former, perhaps, with most propriety, especially as there is but one preparation of it.

To these observations I shall venture to add one more, which is, that distinctions in names, arising from a difference in colour, as occur particularly in some of the preparations of mercury, appear too unscientific to be adopted in a work of such importance; and that it might be desirable if appropriate names, sufficiently distinctive, could be applied, independently of this trite or common-place mode of distinction.

It is impossible, with the utmost caution, to prevent the errors of ignorance or inattention, and which we know have ever happened occasionally, and which, indeed, can be obviated only by the exclusion of unqualified persons, viz. by admitting such persons only as pharmaceutical compounders, who have been duly initiated in that department, and who, consequently, are competent to initiate others; but, however, it should be observed, that the precaution of giving the synonyms of the former with the present Pharmacopœia, would be sufficient to guard against any mistakes whatever, excepting such as might arise from the most gross inattention. Every regular-bred apothecary knows well, that there is much more required in a pharmaceutical compounder than the mere knowledge of the articles and quantities.*

With

* Some years ago I accidentally entered into conversation respecting

With respect to the new Pharmacopœia itself, at least so far as relates to the propriety of the formulæ, presuming it to have been produced by the united efforts of persons best qualified for such an undertaking, notwithstanding any fancied improvements in a few instances which might present themselves to myself, or be suggested by others, I can readily believe that were we possessed of all the reasons which influenced those that framed the formulæ, we should have very little reason, if any, for complaint.

It is proper to observe here, moreover, that we are indebted to the authors of the new Pharmacopœia for many improved formulæ of efficacious old medicines, and for the introduction of several new ones.

It was a matter of considerable satisfaction to me, on the appearance of the new New London Pharmacopœia, to find that so many articles which had retained a place in the materia medica of the preceding Pharmacopœia, had been expunged from the new one of 1809; and that the whole of these articles, including a few others, were such as I had, from the most wearisome experience of their inefficacy, omitted in a "Table of efficacious Medicines," which table was formed several years before the new Pharmacopœia was expected.

This satisfaction did not arise so much from any greater confidence it might have afforded me in the opinions I had formed of these articles, but chiefly from the evidence it presented to me of the improvement respecting the true knowledge of the efficacy of medicines, and the prospect of its future improvement, to which, I flatter myself, I may be in some degree instrumental.

With respect to the new articles introduced into the present Pharmacopœia, I am pleased to see so few of the numerous articles which have been recommended for trial in practice, and ignorantly puffed up as medicines of extraordinary efficacy.

The only fresh articles introduced into the materia medica, indeed, deserving in my opinion of notice, or which have any claim to the title of remedy, during my acquaintance

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ing pharmacy, &c. with a very respectable druggist, who prepared large quantities of pharmaceutical compositions for sale, and likewise compounded medical prescriptions, when, to my great surprise, I found that in all instances he used *avoirdupois-weights* (the small ones excepted, viz. from the drachm downwards) instead of *troy-weights*, appearing to be totally unconscious or regardless of the difference! and it was not without some difficulty that I convinced him of his error, and the consequences resulting from it.

with the profession of physic, which is now a period of nearly forty years, are kino, folia digitalis, and arsenicum.

The first and second of these articles were first introduced into public or general notice, or rather sanctioned in practice, through the medium of the Pharmacopœia of 1787; and the latter, although a familiar remedy for many years under the formulæ of Fowler's drops, forms a new article in the present Pharmacopœia of 1809.*

Of these, kino, which in my opinion entirely supersedes catechu as a remedy in the same intention, viz. as an astringent in alvine fluxes, &c. is alone deserving, in my opinion, of unqualified commendation, and is, unquestionably, a most valuable acquisition to the materia medica, affording that efficacy which is not to be obtained by any other medicine in the same intention.

The folia digitalis and arsenicum are certainly efficacious remedies, but are each of such insidiously-deleterious qualities, the latter especially, as almost to deter practitioners from administering them.

Although there was no formula of a tincture for either kino or folia digitalis in the Pharmacopœia of 1787, we have, for many years, possessed a formula for each in practice.

I have witnessed, it is true, considerable disapprobation expressed, respecting several of the *newly-modified formulæ*, in the Pharmacopœia of 1809, particularly in the instance of the *confectio aromatica*. I venture to believe, however, that I can readily account for this complaint, and remove the cause of it. I suspect, that some pharmaceutical compounders may not be aware of the superior quality of what is ordinarily called *hay-saffron*, above that which is called *cake-saffron*, and might, perhaps, be tempted to use the latter, in consequence of its being a cheaper article.

I am authorised by experience to say, that if hay-saffron be used, in the proportion mentioned in the new Pharmacopœia, carefully dried and finely pulverized, there will be no cause for dissatisfaction; in fact, my old method of making this confection approximated in some degree to the

* The *digitalis* is not a new remedy, a decoction of the root of the same plant having, for many years before, been in use as a powerful remedy in dropsy: the leaf, however, is far superior, used discretionally, in the same intention. The *folia digitalis*, moreover, is a most powerful sedative; consequently, judiciously administered, useful in some hæmorrhages, and in other instances, where the system requires to be suddenly lowered.

one

one now presented to us. Of the six ounces of saffron, directed in the old Pharmacopœia, I used three ounces of cake-saffron, with the zedoary, for the infusion directed, and the other half, viz. three ounces, by weight, of hay-saffron, in its ordinary state, afterwards dried and reduced to powder; the sugar, however, I previously dissolved in the infusion, in the manner of a syrup, and added warm to the other ingredients.

I must confess I cannot help feeling a predilection for the old composition, managed according to the manner I have mentioned; possibly the effect of prejudice alone, arising from habit, believing the zedoary, which is now omitted, communicated a peculiarly aromatic flavour, as well as richness of colour, to the composition.

N. B. The ordinary method pursued in mixing together powders and liquids, is to add the powder to the liquid; but I think it may be considered as a general rule, that where the liquid is of a thin consistence, it is, in all instances, best to add the liquid to the powder; observing, however, that just so much of the liquid be added at first as will admit of the powder and liquid being thoroughly incorporated, adding the remainder by degrees. I have even found that in making cerates, unguents, &c. into the composition of which powders enter, I can produce a more uniform homogeneous incorporation, provided the liquid be sufficiently hot and thin, as where wax and oil are melted together, than by any other method; which not unfrequently leaves the powder, as prepared calamine, or white lead, in minute clots, notwithstanding the most attentive stirring.

I cannot, however, forbear expressing my disappointment in finding an old remedy, which has constantly preserved a place in the various Pharmacopœias, under different modifications, viz. the pulvis basilicus of former Dispensatories, and pulvis scammonii and calomel of the last, viz. of 1787, omitted in the present, without even the appearance of a substitute for it. But since, as I have remarked, it has been the fate of several old medicines to be expunged from the Dispensatory at one time and to be restored again in a succeeding one, (a most striking and humiliating proof of the instability of medical knowledge,) it may be no matter of surprise if this old favourite should be restored again to its place in the next revisal of the London Pharmacopœia.

Would there not have been as much propriety in retaining this composition in the present Pharmacopœia, either according to the formula of 1787, or a better one, if it could have

have been hit upon, under the name of pulvis hydrargyri submuriatis, or some such name, as in the introduction of Plummer's pill, (unquestionably an excellent medicine,) under the name of pilulæ hydrargyri submuriatis?

Thus, in the present Pharmacopœia, we have an instance of a useful old medicine, which was discarded in the Pharmacopœia of 1787, viz. the elixir vitrioli dulce, of the P. L. for 1745, being restored again in the present Pharmacopœia, under the name of spiritus ætheris aromaticus; and, on the other hand, a medicine which, in my opinion, has justly been discarded years ago, viz. sal enixum, which now reappears under the name of potassæ supersulphas.

Perhaps it is to be regretted, that the task of preparing the English edition had not been undertaken by a professional gentleman, who, with equal competency to the gentleman who has executed it, might have possessed more leisure; since, unquestionably, the most perfect edition of this work is not entirely free from inaccuracies, evidently the effect of haste or oversight.

Of these, I shall take the liberty of noticing one, which to persons commencing the practice of physic might tend to mislead them.

The instance I allude to is the Nosological Table, (substituting the *minim* for the *drop*,) where, notwithstanding the author's precaution on this point, in a different part of the work, the minim in measure is evidently confounded with the drop; arising, apparently, from almost implicitly copying the Table of the preceding Pharmacopœia of 1787, in which the drop, in the way of measuring liquids, was erroneously considered as equivalent to the grain by weight, in solids, viz. the sixtieth part of a drachm; thus we find the dose of tinct. opii stated to be from ♏ x to ʒfs in the new Pharmacopœia, and from ϑfs to ϑij in the old one, the preparation being the same in each; whereas the dose of opium itself, in both works, is more properly stated to be from half a grain upwards.

The error respecting the drop being considered as the sixtieth part of a drachm in measure, has, I have no doubt, been productive occasionally of disagreeable consequences in dispensing medicines of an active nature, as tinct. opii, &c. in large quantities at a time, as is sometimes done for patients living at a distance, where measuring has been substituted for dropping, without making due allowance for the difference.

It is remarkable, that, in the new Pharmacopœia, common pitch and Burgundy pitch are both designated under the name

name of pix arida; viz. in the unguentum picis aridæ, and emplastrum picis compositum; this inaccuracy, if I do not err in considering it such, is probably attributable to the same cause.

Such inaccuracies as are to be found in this work are not to be wondered at in a publication embracing such a variety of intricate matter, by a professional gentleman whose time and mind are much occupied in the practice of his profession; and will probably be considered by every candid examiner, as proceeding from unavoidable haste in the execution of it.

Weights and Measures.—The new method directed for measuring minute portions of liquids by the minim measure, instead of by drops, reminds me of a circumstance which occurred to me long ago.

Considering the method of dropping, and measuring liquids, especially with measures of a considerable diameter, as very vague and indefinite, and that perfect accuracy was to be obtained only by weighing liquids as well as solids—a ready way occurred to me of effecting it, viz. by obtaining scales of the various sizes required, differing only in the circumstance of one scale consisting of a glass cup, with a pouring lip, and forming an exact counterpoise to the other scale, made in the ordinary way.

Weighing liquids, I am certain, is the only method to be relied on for obtaining accuracy sufficient for nice chemical combinations. It is scarcely necessary to add, that in all instances the measure should be rinced, as it were, with the liquid which forms the vehicle. It seems to be the prevailing opinion, that the minim measure is not likely to supersede the old method of dropping liquids in practice.

The chief advantage of drop-measuring is, that the smallest portion of any liquid may be obtained without loss; hence its peculiar application in the use of essential oils.

The relative proportions between the minim and the drop, in the various liquids used in medical practice, may be appreciated, taking water as a standard of comparison, in a general way, thus:

Water ----------	gutt. i.	equal to ♏i.
Proof Spirit ------	gutt. ii.	
Alcohol --------	gutt. iii.	

It is a fact commonly known, that the bulk of the drop is affected by a difference in the size of the vial or bottle used, and even by the greater or less thickness in its lip; such

such a vial, therefore, should be chosen, which may readily be done, as will cause a drop of water to tally exactly with a minim, or rather any assumed number of drops, viz. 60, for instance.

Without noticing the various inconveniences and difficulties which must necessarily attend the general application of the minim measure, I shall merely mention one which appears to me as an insuperable objection to its general use, and which seems to have been entirely forgotten or overlooked, viz. that the whole of the liquid contained in the tube measure, (the minim measure to which I chiefly allude here,) cannot be obtained without rincing, or agitating the tube in the vehicle, or mixture; the necessary consequence of which will be a superaddition of the liquid adhering to the outside of the tube: this, in so small a quantity as five drops, the extent of this measure, is not unworthy of notice in any liquid, and in the instances of essential oils, concentrated mineral acids, &c. is considerable indeed.

The propriety of reducing liquids by a regular and exact gradation from the largest to the smallest quantities, is unquestionably a great desideratum; and it appears to me to be obtainable only, as in the instance of solids, by weight, and not by measure; and this, I flatter myself, as I have shown above, is not impracticable. Moreover, were this mode adopted, and the specific gravities of liquids, both in a simple and impregnated state, ascertained, we should obtain the precise degree of impregnation in every instance.

At the commencement, or rather in the prosecution of my philosophical and chemical experiments, I soon found the necessity, on account of convenience as well as accuracy, of weighing liquids of every kind; and by this means alone, it has often occurred to me, that error and uncertainty can be banished from pharmacy. Moreover, I might mention another circumstance, viz. the difference in space liquids occupy, at a comparatively cold or warm temperature; which is peculiarly the case in such liquids as by natural cold approximate to a solid state, as certain oils, &c. even this circumstance is of consequence in making cerates, &c.

The ardour for investigation in any person prompted to discover new facts, leads him naturally to a degree of precision unknown to others not thus influenced; and precision, especially when, at the same time, it includes a greater degree of convenience, is particularly desirable.

A TABLE, shewing the Proportion of Doses, according to the Age of the Person; the full Dose being one Scruple, one Drachm, or one Ounce.

Years	℈j	ʒj	℥j	Years	gs.	gs.	ʒ	gs.
30				13	9½	28	33	44
29	gs. 19⅔	gs. 59	37 gs. 52	12	8⅔	26	3	28
28	19⅓	58	7 44	11	8	24	3	12
27	19	57	7 36	10	7⅓	22	2	56
26	18⅔	56	7 28	9	6⅔	20	2	40
25	18	54	7 12	8	6	18	2	24
24	17⅓	52	6 56	7	5⅓	16	2	8
23	16⅔	50	6 40	6	4⅔	14	1	52
22	16	48	6 24	5	4	12	1	36
21	15⅓	46	6 8	4	3⅓	10	1	20
20	14⅔	44	5 52	3	2⅔	8	1	4
19	14	42	5 36	2	2	6		48
18	13⅓	40	5 20	1	1⅓	4		32
17	12⅓	37	4 56	Months 9	1	3		24
16	11⅓	34	4 32	6	⅔	2		16
15	10⅔	32	4 16	3	⅓	1		8
14	10	30	4	1	⅛	½		4

N. B. The doses are regulated according to an ordinary habit of body, respecting strength; therefore the dose may be somewhat increased or diminished, as circumstances may require.

For females a deduction may be made, according to circumstances, of about one-fifth or one-fourth part.

It will be apparent, that the construction of this Table demanded a degree of minuteness which in practice may be discretionally dispensed with.

The age of 40 may be considered, in strength of constitution, as equal to 30;—50, to 25;—60, to 20;—70, to 16;—and 80, to about 13;—and ordinarily requiring similar doses, varying according to the difference in debility or strength at those ages. Men possessing naturally a good vigorous constitution, and are careful in preserving it, do not arrive perfectly to their acme until they have reached the age of 35; but 30 may be considered as a mature age, sufficient to regulate a table of doses of medicines.

For the Medical and Physical Journal.

On a powerful and convenient Apparatus for locally applying Steam; by JOHN SPENCER HARRISON, Esq. Surgeon, Alstonefield, Staffordshire.

IT is a lamentable truth, that medical gentlemen attending the bed-side of patients, are restricted from adopting many highly-valuable applications: some, though cheap, are not sufficiently convenient to be had; others require too much trouble for the practitioner to regulate and apply; and

and others again are too expensive for the patient. The present communication is intended to remove one inconvenience of the first class.

None can doubt the great utility of applying the vapour arising from water, &c. in many serious diseases; but from the best apparatus being expensive, and often at a distance, it is applied in so inert and slovenly a manner (if used at all) that the patient, so far from being benefited, is commonly made worse, in consequence of the exposure occasioned by it.

What I am going to offer will show that objects near us, and which are familiar to us, seldom engross our meditation; and hence, while the slothful practitioner contents himself with administering internally, another, by an active spirit of inquiry, will make even the most common object a valuable instrument for the cure of disease.

Even the poorest house is commonly provided with a tea-kettle, and to convert this into a most powerful apparatus, the practitioner needs only to bring with him a small brass pipe, from half a yard to a yard in length. A bit of rag being now wrapped round one end of this, it may be thrust into the spout of the kettle. Care must be taken that the water in the kettle does not reach the spout, and that the lid or cover be well secured with a bit of rag and paste applied round it.

The kettle now being set upon a brisk fire, and the pipe elevated some degrees above the horizontal line, the steam will rush out in so powerful a volume as to be totally insupportable at many inches distance from the end of the pipe.

Avoiding all controversy, I shall only observe, that in cases where heat combined with moisture is adviseable, as well in external affections, as when inhaled, perhaps this may prove the most effectual way of applying it. When used generally to the head and neck, all subsequent injury may be prevented, by wiping the parts dry with a warm cloth, and applying warm flannels afterwards.

J. S. HARRISON.

For the Medical and Physical Journal.

Case of Fungus Hæmatodes of the Kidnies; by Mr. THOMAS F. RANCE.

HOWEVER true it may be that some diseases baffle the skill of the medical practitioner, resisting all his curative and palliative attempts, yet these disappointments ought never so to influence his mind as to damp his ex-

ertions, or restrain his endeavours in acquiring a more accurate knowledge of the malady under which his patient labours; for as diseases become the more difficult to remove, so should his researches become the more unwearied and assiduous; and if, from the nature of the complaint, his attempts at restoration or relief prove unavailing, he will generally find some recompense from the knowledge he has acquired in forming a more decisive diagnosis and correct prognosis.

The disease to which I am about to engage your attention, has not till of late years attracted the notice of the profession; and I believe we are indebted to that indefatigable practitioner Mr. Hey, of Leeds, whose investigations have tended much to the advancement of the surgical department of the profession: he (as may be seen in his practical work on surgery) first discriminated the fungus hæmatodes from true cancer, and from its fungated appearance and frequent hæmorrhages named it fungus hæmatodes. With respect to the success which attended his treatment, he candidly informs us that his attempts in this respect generally proved abortive; that neither the internal exhibition nor external application of any remedy subdued the disease, nor did the excision of the morbid part, and in a very few instances did the amputation of a limb when affected, prevent the return of the disease so as to save the life of the patient.

Having lately met with a case of fungus hæmatodes, which considering the age of the patient had acquired a large bulk, I feel a desire to communicate the particulars to my brethren of the profession, through the medium of your widely-circulated Journal; not because I am able to recommend any thing new as it respects the treatment of this malady, but as I had an opportunity of examining the subject after death, I am enabled to state the appearance on dissection, which may prove interesting to the anatomist; and as some of your readers may be desirous of being acquainted with the symptoms and treatment while living, I shall proceed to state them as accurately as I am able.

The subject of this paper was a female child of Capt. B.'s, residing near the Commercial Road, aged one year and five months. She was delicate and slender from her birth; her complexion was fair and pale, and her hair light coloured, her habit of body generally costive, and her respiration short and quick. Mrs. B. having, about the middle of January 1813, discovered a lump in her child's side, became alarmed, and requested me to examine it, informing me that she could not account for its production in any other way than by a fall from a table to the floor. On examination, I found

found a swelling situated in the left hypochondrium inclined toward the spine, which, although scarcely perceptible to the eye, yet when touched by the finger might be distinctly felt about the size of a hen's egg, which had no pain except it were forcibly pressed. As the child had always been thin, and of a very spare habit, its debility did not at first attract the attention of its friends.

The tumour being situated near the spleen, I thought it probably might be a chronic enlargement of that organ, in consequence of inflammation; on which account, on the 16th January, I ordered blood to be taken from the neighbourhood of the affected part, by means of four leeches. As the skin was hot, the tongue dry, and the bowels constipated, I ordered the following alterative:

℞. Pulvis Scam. Comp. gr. x.
Hydrarg. Submur. gr. iv. tere simul bene et divide in chartulas quatuor æquales.
Capt. unam alterâ quâque mane.

Jan. 31.—As the bowels were inactive, I substituted the following:

℞. Crem. Tart. in Pulv.
Pulv. Rad. Jalap, āā. gr. xv. div. in chart. tres.
Capt. unam tertiâ quâque mane.

Feb. 5.—The febrile symptoms were considerably increased, the pulse was quick, the belly costive, and the tongue very much parched (during the whole of the time the child laboured under the disease, the tongue was quite clean, and of a bright red colour).

℞. Hydrarg. Submur. gr. ij.
Pulv. Rad. Jalap. gr. viij. div. in ch. iv.
Capt. unam omni mane.

13th.—The swelling appeared to have increased a little; pulse again quick; mouth very dry; urine natural in quantity and appearance. (The urine throughout the whole of the disease was natural in quantity: toward the latter stage of the complaint it became paler in colour than usual, and was twice bloody: the quantity of urine has been a matter of surprise to me, as the organic structure of both kidnies seemed to be nearly destroyed.)

℞. Pulv. Scammon. Comp. gr. v.
Hyd. Submur. gr. j. ft.
Pulvis mane sumend.

℞. Succi Limon. Recentis, ʒiij.
Kali ppt. gr. xv.
Aq. ʒviij.
Syrup. Croci, ʒi. M. ft.
Mist. Cap. Coch. i. med. 4tis horis.

Feb.

Feb. 15th.—As the tumour increased very much in size, I requested Mrs. B. to take the advice of Dr. Babington, who prescribed the following medicines:

℞. Hyd. Submur. gr. iij.
Sodæ Subcarbon, ℈ij.
Pulv. Cretæ Comp. ʒi. div. in chart. xij.
Capt. i. nocte maneque.

℞. Linim. Hydrarg. (Ph. novæ) ℈j.
Fricetur pars affecta omni nocte.

19th.—Dr. B. again saw her, and prescribed the following mixture:

℞. Lactis Amygd. ʒiſs.
Sodæ Subcarb. ℈i. M.
Capt. Coch. i. med. bis. indie.
Pergat in usu Linimenti Hydrarg. et Applicetur
Emplastrum Hydrarg. parti affectæ.

20th.—Having a troublesome cough, I gave her a little of the Mucilago Acaciæ cum Syrup. papav. which had the desired effect.

April 2d.—As the cough was removed, I desired Mrs. B. to persevere in the last prescription of Dr. Babington.

On the 12th of June the febrile symptoms again returned, owing to a constipated state of the bowels. I gave an aperient powder, which relieved the symptoms.

15th.—The plaster came off in consequence of its having lost its adhesive quality. As the child found relief from its supporting the weight of the tumour, I ordered it to be renewed. She now preferred laying on her right side.

July 3d.—As the child began to loathe the medicines, and shrink from the friction of the liniment, I requested them to be discontinued.

About the 9th of July a tumour began to make its appearance in the right hypochondrium, seemingly from the lower edge of the liver: its situation was so contiguous to that viscus, that it was almost impossible to distinguish it from it.

As I had seen some benefit derived from the use of Calomel and Cicuta in the glandular enlargements of strumous habits, I deemed it adviseable to try their combined effects in this case, and about the 10th ordered them in the following form;

℞. Hyd. Submur. gr. iv.
Pulvis Conii, gr. xij.
Sacch. alb. ʒſs. tere simul et div. in chart. vi. æquales.
Capt. unam nocte maneque.

These, with the application of the Emplast. Hydrarg. I continued till the 7th of August. The urine now became limpid, but natural in quantity.

9th,

9th.—The child voided a considerable quantity of bloody urine, which I concluded arose from the rupture of a blood-vessel in one of the kidnies. Feverish symptoms were again present, with constipation of the bowels.

℞. Infus. Rosæ, ℥ifs.
Magnesiæ Sulph. ʒifs.
Syr. Simpl. ʒifs. M.
Capt. Coch. i. med ter in die.

13th.—The hæmaturia was nearly abated; the urine was now but little tinged with blood. As the bowels were but slightly acted upon, I added ʒfs Magnesiæ Sulphatis to the mixture.

17th.—Urine more natural, and bowels less constipated. Rep. Infus. Rosæ, &c. As this mixture had the desired effect in procuring alvine evacuations, and abating febrile action, and as there seemed no possibility of reducing the diseased enlargement, I only desired this to be given occasionally.

Nov. 4th.—An irritable state of the stomach came on, that organ regurgitating its contents as soon as food was swallowed, to allay which I gave the following mixture:

℞. Conf. Arom. gr. x.
Aq. Cinnamom. ℥i.
Syr. pap. alb. ʒi. M.
Capt. Coch. i. med 4tis horis.

Nov. 10th.—The child was seized with violent fits of pain, often shrieking out, and was continually picking its nose and ears.

℞. Tinctur. Opii, gtt. xij.
Aq. Puræ, ℥i.
Syr. pap. alb. ℥fs. M.
Capt. Coch. i. min ter in die vel sæpius si dolor urgeat.

22d.—The hæmaturia having returned, accompanied with the same symptoms as before, I again had recourse to the Infus. Rosæ, &c. which had the desired effect.

Dec. 8th.—The tumours on each side now became evidently much larger; that on the left side was now so tender, that the pressure of the plaster gave pain; I therefore ordered its removal. So sensible was the part to pain that the child screamed violently when it was touched by the finger.

Jan. 10th, 1814.—The swellings were still increased; that on the left side now formed a very considerable projection between the umbilicus and the anterior superior spinous process of the ilium. The projection felt as if it were the apex of the tumour.

23d.—The bowels were again constipated. As it was necessary to make the medicine as palatable as possible, owing to

to the difficulty there was in getting her to swallow it, I gave the following:

℞. Infus. Sennæ, ℥ifs.
Fructus Tamarind, ʒij.
Man. Opt. ʒi.
Crem. Tart. ʒfs. M.
Capt. Coch. i. med. mane et rep. p. r. n.

Feb. 14th.—The child now took very little food, and would not swallow any thing except it were highly seasoned. She craved continually for ardent spirits, which a servant had imprudently been in the habit of giving her.

16th.—The pain and tenderness of the affected parts were now very great; and the symptoms of irritation were so high as to cause her to pick her nose and ears till they became quite raw and bled.

21st.—The pulse became much quicker and smaller. Both the upper and lower extremities were œdematous. There were now evident signs of approaching dissolution, and the 25th finally closed the scene of her sufferings.

Appearances on Dissection.—Having divided and turned aside the loose parietes of the abdomen, a large tumour presented itself, which seemed to occupy a considerable part of the cavity of the abdomen, having the appearance of the heart when the pericardium is divided. It extended from the diaphragm, which was thrust upward into the thorax, down to the cavity of the pelvis on the left side. None of the intestines were before it, except the great arch of the colon, which strongly adhered to its upper surface. On the left side a tumour was seen rising from under the former, and was in a great measure covered by it. The liver appeared with its lower edge considerably raised upward. The gall-bladder was visible, and completely distended with bile. In endeavouring to remove the larger tumour, I found that it strongly adhered to the lesser, as well as to the mesentery, mesocolon, glandulæ renales, &c. &c. Having accomplished its removal, I proceeded to examine the tumour on the right side, which strongly adhered to the cæcum, the appendix vermiformis being quite imbedded in it. I made a longitudinal incision into it, when a substance of a medullary appearance and consistence escaped. The tumour was so soft, I found it impossible to persevere in any dissection of it. The other viscera of the abdomen and pelvis were in a healthy state, but most of them were thrust from their usual situation. The tumour of the left side, which weighed two pounds twelve ounces avoirdupoise, I took an opportunity of showing to Mr. Astley Cooper, who kindly injected it.

A longitudinal incision being made into it, no appearance of its former renal structure could be observed; but it clearly exhibited three distinct stages of the fungated disease. The posterior surface, although much increased in size, retained its original shape and livid colour. The anterior surface bore but little resemblance to a kidney. The emulgent vessels were considerably increased in size, and the ureter was much distended.

Having recited the particulars of this case, according to the best of my knowledge, I now submit them to your consideration, and, if judged worthy of insertion in your Journal, I shall esteem it as conferring an addition to all former favours. THOMAS F. RANCE.

4, *City Road, Finsbury-square,*
May 11, 1814.

For the Medical and Physical Journal.

Case of Ulceration of the Larynx; by Mr. CLAYTON, Apothecary to the Middlesex Hospital.

JAMES SMITH, a black, on the 1st of January, 1814, became my patient. He was labouring under symptoms apparently pulmonic, viz. cough, pain in the side, and shortness of breath; but neither of these was increased on inspiration. It was also observed that he possessed the power of inflating the chest completely, though not without great effort; and *no difficulty was experienced in expiration.* In addition to these symptoms, he complained of soreness of the throat, fever, and head-ach. He expectorated a large quantity of very viscid mucus, streaked occasionally with blood; and sometimes he bled at the nose. From the known fact that black men do not bear the use of the lancet to the extent generally employed in other subjects, bleeding was not had recourse to; but general antifebrile and pectoral medicines were administered, and with seeming advantage. For the space of twenty-six days he was evidently better. The fever was lessened, and the distressing difficulty of breathing in a great measure removed. On the 26th of January the symptoms returned with considerable severity, nor could he sleep for the distress he experienced in his cough and breathing. Pressure upon the external part of the larynx gave pain, as is experienced in the last stage of phthisis. On the 6th of February the difficulty of breathing was almost insupportable, and he was obliged to keep himself sitting in an erect posture. On the 7th I was called to him in the night: he was bled, with immediate

relief of the symptoms, but they soon afterwards returned, and he died on the 10th.

Appearances of the Trachea after being removed.—No ulceration could be seen in the larynx until it was cut open, and then an ulcer as large as a sixpence was found situated immediately behind the arytenoid cartilages, and occupying that part of the membrane which covers the cricoid cartilage. The ulcer has entirely destroyed the membrane, and has also in a great degree affected the cartilage, which, though the patient was a young man, was completely ossified, and had quite the appearance of a carious bone.

Besides the inflammation caused by the ulcer in its immediate vicinity, there was a considerable degree of inflammation in the mucous membrane, which extended to the upper part of the larynx, and might be traced down into the bronchia. But this general inflammation seemed to have commenced only a very short time before death, as there were not any of those appearances which mark an inflammation of long standing; and, upon macerating the trachea a short time in water, all appearances of the inflammation vanished.

For the Medical and Physical Journal.

Cases *in the* Practice *of an* Hospital Physician.

Case of Ascites.

D. E. aged 13, admitted the 22d of March. About six weeks ago, after complaining much for some time of a pain in her stomach, thirst, and difficulty in passing her urine, which she likewise passed in smaller quantity than usual, began to perceive a swelling in her belly, which, since that time, has been gradually increasing, and is now pretty considerable. The swelling is diffused equally over all her belly, and there is an evident fluctuation in it; her thirst and scarcity of urine still continue, though not to such a degree as at first; P. 112; appetite bad; belly regular; has no symptoms which indicate the approach of her menses; has used a variety of remedies, but no diuretics.

24th.—℞. Aq. Cinnam. font. a. ℥ss.
Oxym. Colchici. ʒi. M. Capt. ter de die vacuo ventriculo.
℞. Cr. Tart. ʒss.
Syr. Simp. q. s. f. Elect.
Sum. Singul. dieb. q. v.

Let her belly be rubbed three times a-day with Ol. Camph. and covered with flannel.

25th.

25th.—P. 82. As formerly. Let her measure the size of her belly from time to time.

26th.—P. 94, and very small. Thinks the quantity of her urine increased. Contin.

27th.—P. 84. The swelling of the upper part of her belly rather diminished. Had six stools yesterday. Contin. Let her have some tamarinds to take occasionally. Let her have an egg for supper, and a bit of meat for dinner.

28th.—The swelling continues to diminish, and the urine to increase. Contin.

29th.—P. 84.—The swelling much as it was, but the quantity of her urine continues to increase. Contin.

30th.—The swelling of her belly continues to increase, and the quantity of her urine to increase. Contin.

April 4th.—No change in her swelling for some days, but has not got her medicines regularly.

5th.—Swelling rather less; her medicines generally give her five or six stools daily.

10th.—The swelling continues to fall, but she complains to-day of head-ach, sickness, and diminished appetite. Sum. Pulv. Ipecac. gr. viij. vesp. Int. alia Med. h. n.

11th.—Vomit operated well. Head-ach and sickness abated. Rep. Med. ut antea.

12th.—P. 80. As before. Cont. Med.

14th.—Swelling continues to abate, and urine increasing. Contin.

15th.—Symptoms continue to mend. Om. Colch. perstet in usu Chrystal. Tart.

16th.—As yesterday. Contin. Elect.

17th.—The swelling seems to be increased, and her urine somewhat diminished; her stools continue as before. Rep. Colch. Contin. Elect.

18th.—Swelling again a little diminished, and urine a little increased. Contin. Med.

24th.—Has still some hardness in the lower part of her belly. Contin. Med.

28th.—Dismissed cured. Let her have some of the Oxym. Colch. and Electuary with her, of which it is advised her to continue in the use for some time.

Case of Pyrosis.

A. I. aged 25, admitted the 23d of March, for two years past has been affected more or less with a swelling in the region of her stomach, which sometimes rises to a considerable height, causing great pain and sickness, and depriving her altogether of her appetite. This swelling used formerly to subside at times, but for more than two months

past has never subsided; it gives her great pain when pressed, and sometimes, though rarely, she belches up wind with relief. She throws up clear water, which is very sour, and, as she says, feels as hot as boiling water for the most part; is costive; has been married two years, and bore a child above a year ago. Her menses appeared lately in small quantity, but have, for some time past, been irregular. Pulse natural.

24th.—℞. Al. Socot. Extract. Gent. a. ʒi.
Sal. Mart. ʒfs.
Syr. Simp. q. s. fiant. Pil. xxx. quarum sum. ij. om. noct.

25th.—Complains much of pain, sickness of her stomach, and difficulty of breathing.

℞. Aq. Menth. Pip. font. a ℥iij.
Magnes. alb. ʒij.
Pulv. Zing. ʒfs. M.
Sum. ℥ifs. bis de die.
Contin. Pil. Applic. Emp. de Cicut. Reg. Ventric.

26th.—Pains of her stomach easier.

℞. Extract. Cicut. ʒij. form. in Pil. xl.
Sum. i. m. and v.
Contin. alia Medicamenta.

27th.—Swelling of her stomach much diminished. Contin. Let her have the same diet ordered for D. E.

28th.—Complains of sickness and pain of her side. Let it be rubbed with Linim. Vol. and covered with flannel.

29th.—Pain of her side relieved. Contin.

30th.—Swelling of her stomach much less, and every way easier. Cont.

April 2d.—Let her have fresh plaister for her stomach.

3d.—Dismissed without complaint. Let her have a plaister larger than the former, and a box of her laxative pills.

Case of Acute Rheumatism.

M. N. aged 17, admitted the 29th of March, on the 24th instant was seized with coldness and trembling, succeeded by heat and thirst, head-ach, vertigo, and other febrile symptoms; has complained all along of severe pains in her back, in the top of her shoulders, and in her knees; belly bound; has never menstruated; P. 120. This patient was admitted into the hospital about the beginning of the year with the same complaints, which were treated with repeated bleeding, sweating, &c. and after a fortnight was dismissed cured.

Injiciatur statim enema domesticum. & Sum. Solut. Tart. Emet. ʒfs. hor. 7ma vesp. more solito at ten o'clock at night.

P. 128. Has vomited freely with two doses of the solution; skin hot and dry, and she complains much of her pains. P. 128. Mittatur Sang. e Brach. ad ℥viij. Statim foveantur Crura.

30th.—P. 128. Was very restless the first part of the night, but slept better towards morning; skin hot; very thirsty; pains still very severe. Mitt. Sang. e Brach. ad ℥vi. st. Rep. Solut. Tart. Emet. vesp. & fov. Crur. more solito. Let her have apple-water to drink, and roasted or boiled apples with panada for food. Inj. Enem. dom. St.

31st.—P. 130. Blood sizy, but the crassamentum very fluid. Threw up some foul viscid stuff with the solution; pains in her limbs easier, but complains much of head-ach, and a pain between her shoulders. Applic. Emp. Lyttæ Nuch. & Sum. vin. rubr. ℔ss. quotid. mixed with her food. Complains of pains in her belly. Inj. En. dom. statim. Contin. Fotus.

April 1st.—P. 134. All her pains easier, except what arise from the irritation of the blistering plaister, of which she complains very much. Let the plaister be removed, and an emollient cataplasm applied to the part. Contin. Fot. & En. dom.

2d.—P. 120. Thirst abated; skin not so hot as it was, and she seems to be easier. Contin. Enem. & Fot.

3d.—P. 120. Took three doses of the Tart. Emet. last night, which vomited her well; skin cool; tongue moist; no thirst; sleeps better. Contin. Enem. & Fot. Sum. Mistur. Salin. ℥ij. 3tia q. q. hor.

4th.—P. 108. Skin cool, and every way better.

5th.—P. 92. Was very delirious in the night, and continued so till ten o'clock this morning, but is now quite sensible. All her pains removed. Tongue clean and moist.

6th.—P. 104. Slept well, and is every way better.

8th.—P. 94. Convalescent.

10th.—P. 100. Has a swelling of the submaxillary glands on the right side. Applic. Emp. Lyttæ pone Aurem dextram.

11th.—The swelling diminished.

12th.—P. 110. Submaxillary glands of the other side swelled. Applic. Emp. Lyttæ ut antea. Costive. Inj. En. dom. St.

13th.—P. 78. The blister has risen well, and the pain is easier.

14th.—P. 92. The swelling of her neck is abated, but the pain still continues, except the frequency. She has hardly any other symptom of fever. Part. Tument. Applic. Catap. ex Mic. Pan. & Lact. addend. pauxil. Ol. Camphor.

15th.—P. natural. The pain of her neck was relieved by the cataplasm. Vesp. Applic. iterum. Cataplasma.

16th.

16th.—Hardly any swelling remains on her neck; and the pain is also gone. Rep. Catapl.

17th.—Neck quite well, but complains of weakness and giddiness. Capt. Infus. Gentianæ ʒij. man. & hor. ante Prandium.

19th.—Continues to recover. Repetatur Infus. Gent.

20th.—Dismissed cured, with some of the bitters.

Case of Trismus.

A. B. aged 14, admitted the 7th of April. About four years ago, after being violently affected by the death of a near relation, became subject to a variety of nervous or hysterical complaints, such as acute pains of her head and breast, globus hystericus, screamings, fainting fits, or fits of lowness, &c. These at first continued upwards of three months, and have returned at least once every year since that time. Their attacks are said always to have been preceded more or less by symptoms of fever. About four months ago she fell ill in her ordinary way, but at the beginning of this attack, after being considerably feverish for some time, and complaining much of pain and swelling of her throat, which was supposed to have suppurated, she was observed to be affected with the locked jaw, which has continued uniformly till this time, insomuch that her mouth can never be opened without forcing a hard substance between her teeth. About four or five weeks ago, she became delirious for several days, after which she began to be affected with a variety of spasmodic contractions almost of every part of her body, but more remarkably of all the flexor muscles of the upper and lower extremities. These, as well as the locked jaw, still continue very constant and severe. She generally complains of severe pain about the breast or stomach, and, when the spasms are violent, her pains are universal. The faculties of her mind do not seem to be impaired; her pulse is quite natural; she has sometimes a considerable degree of subsultus tendinum; there are as yet no appearances of her menses; has grown very fall of late; takes very little food, and commonly throws up what she does take; is generally costive. Inj. Enem. Dom. vesp. Inung. femor. interna Ung. Merc. ʒij.

8th.—Complains of a little soreness of her teeth. In other respects as yesterday. Let only ʒj. of mercurial ointment, with an equal quantity of Axunge, be rubbed in to-night.

9th.—Took an anodyne last night, but threw it up immediately; pains and contractions rather more severe to-day; costive. Inj. Enem. dom. St. & post horam. Inj. Enem. ex Inf. Lin. ℥iv. Tinct. Opii gtt. l. Contin. Unct.

10th.

10th.—Retained the anodyne injection, and passed an easy night. Rep. Enemata ut heri.

11th.—Continues as yesterday. Contin. Enem. & Unct.

12th.—Passed an easier night than usual; mouth begins to be a little affected. Intermit. Unct. hac noct. Rep. Enem.

13th.—P. 86. As before. Rep. Enem. Purg. & Anod. ut antea.

14th.—P. 84. Symptoms as before; did not retain either of the clysters last night. Vesp. hor. 6tâ Injic. Enem. fœtid. & reddito hoc enemate, post horam unam vel alteram, Inj. Enem. ex Aq. font. ℥ ij. Tinct. Opii, gtt. lx. Continues to spit.

15th.—P. 68. Had a stool by the first clyster last night, but did not retain the second; symptoms continue as before. Omittatur Enema & Capt. Haust. ex Aq. Cinnamon. Syr. Limon. ãã ℥ ß. Tinct. Opii, gtt. xxx.

16th.—P. 82. Took very little of the draught last night, and she seemed to retch after it; has had a stool to day. Capt. hor. Som. Tinct. Opii, xxx. ex lacte. Let some electrical sparks be taken from the outside of her wrists.

17th.—Was hardly sensible of the sparks taken from her wrists yesterday; other symptoms as before; she got the Tinct. Opii, but not mixed with milk as prescribed; was more restless than usual last night. Let her have a moderate shock of electricity through each wrist.

18th.—Did not complain of pain from the electrical shocks yesterday, which occasioned a little starting of her whole body, but no motion of the joints to which they were applied. Symptoms continue as before; had a small stool to-day. Let three or four electrical shocks be given to each wrist, and let her have Tinct. Opii gtt. v. every half hour till she has taken it ten or twelve times.

19th.—Would take only three doses of the laudanum. The electricity, though it made her start, did not give her any pain, and had no effect upon the motion of the wrists to which it was applied. Let it be made stronger, and six shocks given to each wrist. Injic. Enem. ex Sal. Com. ℥ j. Reddito hoc enemate. Aq. tepid. ℥ ij. cum Tinct. Opii, gtt. lx.

20th.—Several shocks of electricity, as strong as the machine would admit, were applied, but without seeming to give her any pain, or making any change in the state of the joint; had a stool by the laxative clyster, but is uncertain whether she retained the anodyne; rest much as usual.

℞. Op. gr. ij. divid. in Pil. ij.
Capt. vesp. 2bus vicib.

21st.—Did not reject the pills last night, but they have made no sensible alteration on her symptoms. Vesp. Inj. in En. Salis, & h. s. Capt. Opii, gr. iij. in Pil. ij. divis.

22d.

22d.—Had a stool by the clyster yesterday. Kept the pills on the stomach, though she had some retching after taking them; slept better than the night before, but not better than she has usually done; the contractions of her limbs continue the same, and she complains of more than usual sickness this forenoon. P. M. Inj. En. ex Aq. tepid. ℥ij. & h. s. Capt. Op. gr. iij. ut hesternâ nocte.

23d.—Refused to have the clyster yesterday; kept the pills on the stomach at night, but they have had no effect on her symptoms.

℞. Opii, gr. iv. divid. in Pil. ij. hor. s. sumend.

24th.—Slept no better last night than usual; symptoms as before; had no stool yesterday. P. M. Inj. En. Salin. & h. som. Capt. Op. gr. v. in Pil. ij. divis.

25th.—Had a stool by the clyster yesterday; has slept better than usual this morning; continues drowsy to-day; other symptoms much as before. Hor. Som. rep. Opium ad gr. v. ut heri.

26th.—State of symptoms much as yesterday; wrists rather more moveable. Vesp. Inj Enem. Salin. & h. s. rep. Opium ad gr. iv. in Pil. iij. divis. Had no stool yesterday.

27th.—Had a stool by the clyster, but did not take the pills till this morning. Hor. som. rep. Pil. ut heri prescript.

28th.—Though she took the dose last night as ordered, she has been rather more restless and slept less than usual; symptoms otherwise the same. Capt. statim Opii, gr. iij. in Pil. ij. divis. & h. s. rep. Opium ad gr. vi.

29th.—Became sick yesterday afternoon, and vomited very frequently in the night; still continues sick; other symptoms as before. P. M. Inj. Enem. Salin. omitte Opium.

May 1st.—Had a stool by the clyster yesterday; symptoms much as before. H. s. Capt. Opii, gr. v. in Pil. ij. divis.

2d.—Could not take the pills last night; symptoms as before. P. M. Inj. En. Salin.

3d.—Dismissed at her own desire.

(To be continued.)

For the Medical and Physical Journal.

Remarks upon Mr. M'Donald's Objections and Statement respecting the Convulsive Epidemic in Cornwall; by Mr. CORNISH.

IN the Medical and Physical Journal for this month, I have just read a paper entitled "Observations on Mr. Cornish's Account of a Convulsive Epidemic in Cornwall, by Mr. James M'Donald." As Mr. M'D. has endeavoured to fix on me a charge, which no man who is confident in his veracity can overlook, I trust you will do me the justice to enable me to vindicate myself from so foul an imputation. The charge

to

to which I allude is conveyed in the last paragraph of Mr. M'D.'s paper, where he says, "Without supposing that Mr. C. has *intentionally* misrepresented any of the facts recorded in his paper, it is proper to observe that three accounts which now lie before me, written by eye-witnesses, who are men of sound sense and strict integrity, *differ materially* from that which he has given." Had Mr. M'Donald candidly stated in what particular circumstance I had been guilty of misrepresentation, I should have been able to reply to it directly; but, as he has sheltered himself under a general charge, I am at a loss to discover in what respect my account "differs materially." If the difference between my account and that which Mr. M'D. has received from "eye-witnesses of sound sense and strict integrity" be *material*, it must be in some of the following circumstances. No such disease, or no such symptoms, have existed as I have described; or the disease has not prevailed to the extent asserted; or no different opinions have been entertained respecting its cause; or the exhortations, &c. to which the affected individuals had been exposed were not of the nature I have stated. These appear to me to be the only circumstances wherein a difference considerable enough to amount to a "misrepresentation" can have arisen. That the symptoms were as I have described, that different opinions have prevailed respecting their cause, and that the exhortations were of the nature I have stated, are facts, for which I am personally responsible, and of which, if necessary, I can adduce ample proofs. That the disease has prevailed in the places, and to the extent mentioned, I have the authority of the methodists themselves for asserting, which authority I suppose Mr. M'D. will not hesitate to receive.

The manner in which Mr. M'D. proceeds is somewhat remarkable: he reads a history of a convulsive epidemic, and of the different opinions that have been entertained respecting it; he argues through several pages in opposition to an opinion which he insists I maintain; and after having very gravely flattered himself that he has proved the opinion which he had forced on me erroneous, after having given himself all this unnecessary trouble, he tells his readers that he is in possession of several accounts which differ materially from mine; and that I have been guilty of misrepresentation; although he does not suppose it intentional: and after having asserted this, he does not think it "proper" to put his readers in possession of any of his numerous proofs. If I have been guilty of misrepresentation, it must have been intentionally, for Mr. M'D. will recollect that I have stated in terms too plain to be misunderstood, that I was an eye-

witness of what I described. Can any one imagine a person of common understanding to be guilty of such egregious folly and deception, as to publish to the world an account of a disease which had no existence but in his own fancy, (which Mr. M'D. must mean by "material difference" and "misrepresentation," if he mean any thing,) and this too when he must have been well aware that exposure to merited obloquy and contempt would have been the inevitable consequence of such an act! Such folly and deception I can only conceive to exist with a person who racks his imagination concerning the cause of a disease, of the non-existence of which he pretends to have proofs, and yet declines to avail himself of their authority.

There are two or three remarks I would wish to make on the former part of Mr. M'D.'s paper. Before, however, I proceed to these, I beg to say, I would ever carefully avoid all theological disputes.

Mr. M'Donald does not appear perfectly satisfied with the name I have given the disease "Convulsive Epidemic." How far Mr. M'D.'s correspondents have supplied the information necessary to form a correct opinion on the subject, I am not acquainted; but I presume that there is not one amongst them sufficiently hardy to deny that the individuals were convulsed. That the disorder was epidemic, or spreading, is abundantly proved by its extension over so considerable a part of this county. If he did not consider the title as adequately expressive of its nature, he should have either pointed out in what it was defective, or have proposed what he considered as a more correct denomination.

Mr. M'D. says that I have not hinted that recourse has been had in this case to medical assistance. When the disease first made its appearance, it was encouraged by a vast majority of those who witnessed it, under an impression that it was the operation of the Spirit of God upon the soul; and any attempt to interfere with respect to the affected individual, either as to assistance or advice, would have been considered as tending to prevent the conversion of a sinner; and might even have been attended with consequences dangerous to the proposer. Subsequently, however, men's minds seem more disposed to view the subject in a rational light, and some of the methodists themselves are now scrupulous in admitting it to have been produced by the cause to which they were at first inclined to ascribe it. As proofs of this, I beg to relate the following facts:

On the evening of the 2d of this month, I accidentally stopped at the door of their chapel in this town. Shortly two young women were brought out in the state in which I had

had before seen many others in the same place. One was in a swoon; her respiration was slow and deep, her countenance pale and haggard, and her general appearance that of a person whose strength was exhausted. I laid my fingers on the wrist, but could scarcely distinguish the pulsation of the artery. I immediately recognised this to be the termination of a paroxysm. One of the preachers asked the bystanders whether she had been subject to these *fits*? the answer was "yes." "How long?" "Two or three months," viz. from the time the affection began to prevail in the county. After exposure to the air for some time, this patient got better. I then visited the other young lady in whom the paroxysm was (if I may judge from its violence) at its height. Several men held her on the bare ground, in the open air, and a number of females stood around her, so that I was prevented from observing her case so narrowly as I wished. I however understood that she had bitten either her tongue, or her lips, and that blood was flowing from her mouth. I heard her grinding her teeth, and saw her pull her cap off, and writhe most furiously. Some one crammed a handkerchief into her mouth to prevent her doing herself any further injury. The same preacher who stood by me when observing the former case, again took post at my elbow. He asked the same questions as before, to which like answers were given. He asked if she had been ever bled. No one could give the required information. He then observed that he had understood bleeding was sometimes advised by medical men in such cases, and when I was pointed out to him as such, he said he did not wish to obtrude an opinion, nor was he sufficiently acquainted with the nature of disease to determine the propriety of any remedy; but he only meant to say he had heard recourse was sometimes had to bleeding under similar circumstances. Now I would ask what would any one suppose was this gentleman's opinion of the affection? Is it not evident to every one, from the queries he made, that he considered these two women to labour under *disease*, and that he also imagined measures might be taken to alleviate or cure it? The following evening, talking with a sensible methodist, he candidly owned that these two cases which he himself saw greatly favoured the view I had taken of the subject.

JAMES CORNISH,
Member of the Royal College of Surgeons.

Falmouth, June 5, 1814.

COLLECTANEA MEDICA,

CONSISTING OF

ANECDOTES, FACTS, EXTRACTS, ILLUSTRATIONS, QUERIES, SUGGESTIONS, &c.

RELATING TO THE

History of the Art of Medicine, and the Auxiliary Sciences.

Experiment on Respiration, which had nearly proved fatal.—Beneficial Effects of Oxygen Gas in restoring suspended Animation; by SAMUEL WITTER, Esq. Dublin.

THE following case occurred very lately in the laboratory of the Dublin Society, and excited considerable interest.—When a mixture of carbonate of lime and zinc, or iron filings, is exposed to an intense heat, the peculiar gaseous substance named carbonic oxide is disengaged, which has been stated to bear the same relation to carbonic acid that nitrous gas does to nitric acid. But agreeably to the striking observations of Mr. Higgins, professor of chemistry to the Dublin Society, in his work recently published, wherein his claim to the discovery of the atomic system is unequivocally established, it would appear that, in the combination of oxygen with different gases, it is the atom of oxygen only that is found multiplied, as is beautifully exemplified in all the metallic oxides, acids, and gases. An apparent anomaly has been noticed with respect to nitrous oxide, which the experiments of Mr. Higgins on the composition of nitrous gas tend to obviate, and sanction a comparison of the proportions of carbon and oxygen in carbonic oxide with those of azote and oxygen in nitrous oxide, rather than the atomic coincidence of carbonic oxide and nitrous gas. Carbonic oxide was discovered and described by Mr. Cruickshank in 1801; it is highly combustible, burning with a fine blue flame, but is utterly incapable of supporting animal life.

The diversified experiments of Sir H. Davy on the respiration of nitrous oxide and some other gases, so interestingly described in his scientific researches in 1800, in a great measure dissipated the general apprehensions of fatality resulting from the inhalation of compound gases, and satisfactorily demonstrated that many of the aërial fluids, before considered as destructive to vitality, might be breathed with perfect safety.

Desirous of witnessing the progressive effects of carbonic oxide when freely respired, with a view to comparative analogy in reference to nitrous oxide, I was tempted a few days ago to inhale a portion of it as copiously as possible. The consequence had very nearly proved fatal to me. A considerable quantity of the gas having been carefully prepared by Mr. S. Wharmby, the very ingenious and able assistant to Mr. Professor Higgins, a series of experiments on its respiration were proposed. Mr. Wharmby first noticed some points of resemblance it bore to the nitrous oxide, particularly the singularly sweet-

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ish taste, and, having made two or three inspirations, was seized with a degree of convulsive tremor and giddiness that nearly overpowered sensibility. These violent effects were but transient, though considerable languor, headache, and debility, remained for many hours afterwards. Anxious to pursue the experiment still further, I next made three or four hearty inspirations of the gas, having first exhausted my lungs of common air as completely as possible. The effects were an inconceivably sudden deprivation of sense and volition. I fell supine and motionless on the floor, and continued in a state of total insensibility for nearly half an hour, apparently lifeless, pulsation being nearly extinct. Several medical gentlemen being present, various means were employed for my restoration, without success; when the introduction of oxygen gas by compression into the lungs was suggested, the effects of which may be fairly contrasted with those of the carbonic oxide. A very rapid return of animation ensued, though accompanied by convulsive agitations, excessive headache, and quick irregular pulsation, and, for some time after mental recovery, total blindness, extreme sickness, and vertigo, with alternations of heat and shivering cold, were painfully experienced. These unfavourable spasms were succeeded by an unconquerable propensity to sleep, which, as might be expected, was broken and feverish. An emetic of tartarised antimony finally removed these alarming symptoms, and the only unpleasant effects felt on the ensuing day were those occasioned by the fall.

I very much regret that the confusion arising from the idea of my death, so disturbed the arrangement that no accurate determination could afterwards be made, either of the quantity of gas respired, or the change it underwent in the process; and the experiment is rather too hazardous for repetition. Nevertheless, the extraordinary efficacy of oxygen gas in cases of suspended animation produced by carbonic acid, choke damps, and other suffocating gases, is fairly deducible, and, I conceive, cannot be too forcibly recommended to the faculty, in such instances. I therefore sincerely hope that the results of this experiment may be of practical utility in those cases, which are so frequently occurring, and are often so awfully fatal; it being the decided opinion of the professional gentlemen present on this occasion, that the free use of the oxygen gas was solely instrumental in restoring me to life.

Mr. Higgins himself had nearly once fallen a victim to a similar experiment with sulphureted hydrogen, the effects of which, after recovering from a death-like insensibility, were painful and oppressive for many days.—*Philosophical Journal.*

The History and Dissection of a Case, in which a Foreign Body was found within the Heart; by WILLIAM WOOD, Esq. Fellow of the Royal College of Surgeons, Edinburgh.—A. S., a girl of 15 years of age, who had been always of rather a delicate habit, about three years ago, when walking along the street, became suddenly affected with great difficulty of breathing, and general weakness, and was so unwell, that it was with difficulty she could continue her walk

walk home. Next day she was rather better, but ever afterwards remained subject to difficulty of breathing on taking any violent exercise. In addition to this complaint, she, soon after the first attack, became affected with constant strong pulsation in the region of the heart, much increased on walking up stairs, or climbing an ascent. It was at this time that I was first called to see her. I found her complaining very much of uneasiness in the chest, from the constant palpitation; she could not bear her clothes at all tight, and she seemed very uncomfortable when the hand was pressed at all firmly on the thorax. The palpitation was so strong, that it could be distinctly seen at a considerable distance. On applying the hand over the region of the heart, strong pulsation was felt; and at a particular spot, about the size of a crown piece, a peculiar thrilling sensation was communicated to the fingers at each stroke of the heart, not easily to be described, but somewhat resembling the effect produced on the ear by the emission of a short hissing sound at frequent regular intervals. She was thin and pale, but took her food well. The pulse was regular. She could lie down in bed, but her sleep was disturbed by disagreeable dreams. These complaints gradually increased in severity, with the addition of fainting-fits of some duration, occurring generally three or four times in the course of every day. These were sometimes so sudden in their attack, that she dropped down instantly, deprived of sense and motion; at other times, according to her friends' account, they were preceded by an involuntary contraction of the fingers and toes. These fainting-fits continued for upwards of two months, when they left her, and never again returned. Being removed to the country, I had no opportunity of seeing her for some time, but I was informed, that, while there, having spit up a considerable quantity of a clear watery fluid, after a severe fit of coughing, she had become considerably easier, and could take a little gentle exercise, which she had not been able to do when she left town. On her return, I found her certainly rather easier, but the strong palpitation was still constantly present. This state of comparative comfort, however, was of short duration, for very soon the symptoms became all much aggravated, with the addition of frequent spitting of blood, though in no great quantity. She was now unable to lie down, but was supported in bed by means of pillows, in nearly an upright posture. The pulse was intermittent. She had a very sallow complexion, and was extremely out of spirits. She lingered on, gradually and slowly losing strength and flesh, till the beginning of November, when she died quite exhausted, above three years from the commencement of her complaints. For many weeks previous to her death, dropsical effusion had taken place into the cellular substance of the lower extremities, and by her friends' account, for about fifteen or sixteen days, large purple spots, of the size of half-crown pieces, had appeared on different parts of her body.

During her illness, digitalis was repeatedly administered, occasionally with the effect of procuring temporary relief; the rest of the treatment

treatment consisted in regulating the diet, attending to the state of the bowels, and in occasionally exhibiting cordials.

Dissection.—Within the general cavity of the thorax there was found a very considerable quantity of bloody serum. The lungs in general were of a healthy appearance, but towards the root of one of the left lobes, there was discovered a considerable mass of a white gritty concretion.

The pericardium, which was somewhat thickened, being laid open, several ounces of clear serum were removed, and the heart brought into view, considerably larger in size than natural, the increase appearing most remarkable on the right side, the cavities of which, particularly the auricle, were much distended with blood. The heart being removed from the body, with the view of having it particularly examined, the right auricle and ventricle were laid open; in these the disease seemed to be entirely confined to enlargement of their cavities. The tricuspid and semilunar valves of the pulmonary artery were apparently in a sound state.

On slitting open the left auricle, which appeared larger than usual, the musculi pectinati were observed to be considerably increased in thickness; and there was found occupying, and nearly entirely filling up the cavity of the left sinus venosus, a round firm body of considerable size; immediately under which, and over the situation of the opening into the ventricle, there was contained another solid substance of another form. A third substance, rough and irregular, had also been lodged in the auricle, but its situation could not be precisely ascertained; it lay however towards the ventricular opening. All these being removed, an attempt was made to pass the finger from the auricle into the ventricle, but this was found to be impossible. The left ventricle was therefore fully laid open by an incision, and, on examining the mitral valves, they were found to be much thickened, and quite opake, by their connection and situation permanently contracting the opening from the auricle into a small oval fissure, into which, not even the tip of the little finger could be introduced.

The semilunar valves of the aorta were opake, and much thickened.

The substance, occupying the sinus venosus of the left auricle, when particularly examined, was found to be of a darkish red colour, in form completely spherical, measuring rather more than an inch and a half in diameter. It felt firm, but elastic; the surface was every where smooth and polished but having a singularly clotted appearance. It had no connection with the surrounding parts, rolling loosely in the auricle. When cut open, after having been kept for some days in diluted alcohol, it was found to consist of a sac, one eighth of an inch in thickness, formed of an immense number of firm smooth laminæ, which could be easily separated from each other. Within the cavity formed by this sac, was contained a quantity of coagulated blood. The flat substance which lay between the round body and the opening into the ventricle, was of an oval form, an inch in length, and three-fourths of an inch

across at the broadest part. Its upper surface was of the same smooth clotted appearance with that of the former, slightly concave, so as to form a kind of superficial socket for it to roll in; the under surface, which lay over the mitral valves, was rough and irregular, containing something resembling a firm coagulum of blood in a concave depression.

The symptoms and progress of the disease in this case, differ little from those generally met with in cases where there has been found, after death, such an alteration in the structure of the heart, or of the large vessels arising from it, as must have disturbed the regularity of the circulation of the blood through that organ; the dissection, however, appears to be singular and interesting, from its affording an example of the formation, during life, and existence for probably a great length of time, of loose solid substances, of considerable size, within one of the cavities of the heart.

All the symptoms of the disease, as well as the morbid appearances of the right cavities of the heart, may be, I think, satisfactorily explained on the principle of obstruction to the free passage of the blood through the left side of that organ; and, indeed, the principal difficulty in the case seems to be, in conceiving how the circulation should have been sufficiently carried on to maintain life for any length of time, under such a degree of obstruction as must have been produced in this instance, by the joint effect of the diseased mitral valves, and of the foreign bodies contained in the left auricle, the former materially contracting the opening between the auricle and ventricle, and the latter retarding and diminishing the current of blood towards it; an effect which, from their situation, size, and form, these substances seem to have been well calculated to produce.

With regard to the morbid appearances on the left side of the heart, the most probable supposition appears to me to be, that the disease had originally existed in the mitral valves, producing a diminution in the size of the ventricular opening; that, in consequence of this contraction, accumulation of blood had taken place in the left auricle, and coagula had been there formed, upon which coagulable lymph had been afterwards slowly and gradually deposited; the different substances thus formed assuming different shapes, according to the relative situations in which they had been placed with regard to each other, and to the internal parts of the auricle. But whether this be or be not the true account of the formation of these solid bodies, there can be no doubt, I think, from their laminated structure, that they had existed during life; indeed, upon even the most superficial examination, they are found to be essentially different from those coagula so frequently formed after death in the different cavities of the heart, termed polypi. They are quite different too from those apparently organized solid substances, which have been occasionally met with, adhering firmly to some part of the internal surface of the heart.—(Allan Burns on the Diseases of the Heart.)

That cases in which foreign bodies have been formed within the heart

heart during life are of rare occurrence, may be inferred from the circumstance of Dr. Baillie not having seen one of the kind. In the fourth edition, however, of his invaluable work on Morbid Anatomy, he refers, in a note, to two cases which had occurred to Mr. Brodie. "In some instances," says Dr. Baillie, "a coagulum of blood has been found of a laminated texture, in such parts of the heart as are most remote from the direct current of the circulation. This laminated texture shews, that the coagulation had taken place during life, and in a gradual manner. Two cases of this kind have been observed by Mr. Brodie, who, although young, is already well known to the public as an excellent anatomist and physiologist. Such cases, however, are to be considered as different from the coagulations which have been generally called polypi, and which fill up entirely one or more of the large cavities of the heart."—(Note to the fourth edition of Baillie's Morbid Anatomy.)

From the concise account here given of these substances, they appear to agree with those met with in the present instance, in being of a laminated texture; they differ, however, with regard to situation, in Mr. Brodie's cases having been placed out of the direct current of the circulation, while here they must have been constantly and directly exposed to the stream of blood from the pulmonary veins. Portal makes mention of various kinds of substances found within the heart, some of which he says, are of a laminated texture. He seems to doubt, however, their having been formed during life, although he does not deny the possibility of such a thing happening.

My friends, Dr. Gordon and Mr. Turner, inform me, that they recollect seeing, at a dissection in the Royal Infirmary here, five small loose round substances, of a rough shaggy appearance, taken out of the left auricle, in a case in which there had existed disease of the mitral valves; when opened they were found to be hollow, and to contain a quantity of a whitish fluid.—*Edinburgh Med. and Surg. Journal.*

Case of a Man who vomited a urinous-tasted Liquid; by W. Reid Clanny, M.D. M.R.I.A. Honorary Member of the Royal Physical Society of Edinburgh, and Physician to the Sunderland Dispensary.—Ralph Cooper, æt. 24, Ph. Pulmonalis et anasarca. Admitted at the Sunderland Dispensary, May 27th, 1813. This young man is well formed but delicate. His feet and legs are much swelled and hard; the urine is in very small quantity and high coloured; the pulse is frequent and quick in the beat. He is tormented by a severe cough and purulent expectoration; and not long since the sputum was mixed with blood, and frequently the hæmoptysis has been severe. By the use of digitalis purpurea in substance, supertart. potassæ, diluted sulphuric acid, and occasional opiates and laxatives, he has been greatly relieved, though the relief is not permanent; for the least exposure to cold or damp produces a return of all his bad symptoms.

It is not needful to record here the daily and weekly practice; as it would not only greatly enlarge the communication, but also dis-

tract the attention from that particular phenomenon to which I wish to draw the readers. I was called to visit him upon the 12th of December, when he informed me that from the medicines which I had ordered him he was so much relieved, that he considered himself as restored to health, and that a few days before he had been working very hard as a caster of coals upon the river Wear, which had produced a return of his former complaints to a much greater degree than hitherto. His legs and thighs are considerably swelled, the abdomen is much distended, and shows all the symptoms of ascites abdominalis. The urine does not exceed a pint in quantity, which is very high coloured, and upon cooling a lateritious sediment is deposited. The bowels are pretty regular, and the pulse fluctuates between 115 and 120. With these symptoms, the expectoration is purulent and copious. The appetite is very bad and frequently depraved. In a word, there is not one favourable symptom, and his dissolution may be expected at no very distant period. It is his wish, as well as mine, to obviate particular symptoms, so as to render him comfortable.

20th December.—Since my last visit he has been attacked several times by severe and incessant vomiting: he observed that the quantity of liquid which he vomited greatly exceeded the quantity of liquid which he had swallowed for several days before; while at the same time the urine which was passed by the urethra was stationary as to quantity, and tolerably healthy in appearance. He describes the liquid which he vomited as exceedingly offensive, and to be of a salt and urinous taste. He was astonished to find that the feet, legs, thighs, and abdomen, gradually diminished in size during the time of the vomiting, which must have been affected solely by the vomiting, in seven days; for, as was stated above, he was then using no active remedies, which appeared to be quite unnecessary in his very deplorable state. He also reports that the quantity of water which came off his stomach must have been to the extent of several gallons. The bowels have been and still continue regular.

Under these circumstances I became an anxious spectator, except that, when needful, antispasmodics were directed to alleviate the very uncomfortable state of the stomach.

January 5, 1814.—This day I found the patient relieved from all dropsical symptoms, but in a state of great debility; pulse 82, weak, soft, and regular. He is able to sit up in the afternoons. The urine is in sufficient quantity and approaches a natural state. He is not thirsty as formerly, though he finds it needful to rinse the mouth at different times in the day with tamarind-water. His appetite is very bad, and he spirts urine to a considerable extent, without any difficulty. He remarks that after the distressing vomiting ceased, he was tormented by a severe itching over the whole body, particularly upon the hands, which now appear as if they were affected by an herpetic eruption. He has no uneasiness of the thorax, but from indigestion he has pain in the region of the stomach. The vomiting is at times troublesome, though he does not observe that there is more liquid vomited than he had previously swallowed. A

distressing

distressing diarrhœa has commenced, which is occasionally relieved by opium pills.

It is much to be regretted, that I had it not in my power to examine the liquid which he vomited in such large quantities, as a chemical analysis would have demonstrated its affinity to urine; but from not knowing of the very singular and unlooked-for turn which took place, till after the vomiting had ceased, such a desirable circumstance was entirely frustrated.

The only cases of a similar nature which I have read, are to be found in Dr. Percival's Essays, Medical, Philosophical, and Experimental, at page 375, vol. 1st, 4th edition; where the case of a female is narrated in his easy, natural, and unaffected style. In the Medical Facts and Observations, vol. 6, page 212, the case of a female is well delineated; besides these, the case of a nun and of a monk, are to be found in the Histoire de l'Academie Royale des Sciences, Années 1715 and 1722. But in none of these cases is any mention made of the salt and urinous taste of the liquid which was vomited, as in the case of Ralph Cooper; and here the theory of "the regurgitation of fluids in the absorbent vessels," which was broached by that superior youth, Mr. Charles Darwin, naturally presents itself to the mind: of his theory, and the experiment made upon his friend, an ample account is to be found in that excellent practical work the Medical Commentaries, vol. 7, page 193. *Annals of Philosophy.*

Case of Retention of Urine successfully treated by puncturing the Bladder; by JOHN TAUNTON, Esq. Surgeon to the City and Finsbury Dispensaries, and to the City of London Truss Society for the Relief of the ruptured Poor, &c. &c.—John Jones, aged 67, a brass turner by trade, a stout muscular man, his general health extremely good, with the exception of an ulcerated leg for the last twenty years, and, during the last eight or ten, hydrocele on one side and hernia on the other. For the last twelve months also he has experienced some difficulty in voiding his urine, which came away in small quantities at a time, and with frequent calls. On July 7, 1813, after a hearty dinner he sat an hour or two in the open air, during which time he was attacked by violent pain in the abdomen, with purging. These symptoms continued all night, and his urine came away in drops without any effort. On the 8th he was admitted a patient of the Finsbury Dispensary. The abdomen was hard, swelled and painful; and there was a considerable degree of fever, attended with thirst; the purging also continued. The leg, which had been much inflamed for the last three months, is now better. An anodyne fomentation and some powdered rhubarb were prescribed for him by the physician who visited him till the 13th; and during the interval aperient fomentations, &c. were resorted to with a view to relieve the complaint in the bowels and general disorder of the constitution. On the 13th, Mr. Taunton was requested to see him, on account of the stillicidium urinæ which had existed

from the beginning of the attack. He found him with quick weak pulse, brown tongue, violent pain in the region of the bladder, which was distended, forming a tumour reaching above the umbilicus; the urine was dribbling away involuntarily. The catheter was introduced, but could not be passed beyond the neck of the bladder. The smallest gum catheters were also tried without effect. Continuetur fomentum.

14th.—The bladder reaches still higher up; the catheter again attempted, but in vain; other symptoms the same. Puncturing above the pubis was determined on, and consented to by the patient. Upon going to perform the operation at three o'clock, it was found that a considerable quantity of urine had come away involuntarily, and almost in a stream, and the patient would not now consent to the operation: nor was it urged, as the bladder was greatly reduced in size. The tongue was still brown, and the other bad symptoms continued.

15th.—The patient was nearly in the same state: stillicidium constant.

16th.—The tumour formed by the bladder is more prominent and circumscribed; reaches about two inches above the umbilicus; in other respects the same: pain decreased. The operation was now performed, and between two and three quarts of urine were taken away; it was not grumous, nor materially altered from that of a healthy person. During the operation the pulse fell, but soon regained its strength. A long elastic catheter was left in the wound, and properly secured. A cordial mixture was prescribed. In the evening the bougie used as a stilette was withdrawn, and the urine evacuated: no pain on pressure on the abdomen, which was soft, and the tongue clean.

18th.—The urine escapes by the side of the catheter, but is not effused into the cellular membrane; adhesive inflammation was visible round the wound. The urine flows involuntarily, but he feels easy. He took broth yesterday: the tongue was clean, the pulse was stronger and slower.

19th and 20th.—A slight blush of inflammation immediately around the wound; no pain experienced on pressure.

21st.—Has felt pain in the night, seemingly from a temporary obstruction to the flow of urine, which was soon evacuated, and the pain went off.

22d.—The catheter escaped during the night; but the urine flows freely from the orifice, and he continues to gain strength. From this period to August 28th convalescent. The passage of a small bougie has been attempted two or three times without success. The patient complains of considerable pain in the urethra, which prevents his sleeping without opiates; and he takes a grain of opium every night. He walks out, and his spirits are better.

September 10th.—The quantity of urine discharged by the urethra has sensibly increased, until it all comes away by that channel. The opening had closed a few days before, but it broke out when straining

straining at stool; he does not know whether any urine escaped or not, but nothing comes from it at present.

17th.—Much in the same state; complains of soreness where the puncture was made, and a little matter oozes from it; a considerable quantity of urine came through on the 13th and 14th. From this time he gradually recovered, and was discharged cured the beginning of November, since which he has not had any return of the complaint.—*Philosophical Journal.*

Copy of a Letter from JOSEPH D. A. GILPIN, M.D. *Inspector of Military Hospitals at Gibraltar, to* COLIN CHISHOLM, M.D. F.R.S. *&c. Bristol.*

My dear Sir,—Your letter of April last must have taken a long round before it reached me.

I have lately seen Dr. Bancroft's book on Yellow Fever; and was sorry to observe, that a difference of opinion could be productive of a harshness of language and remark, surely inadmissible, on a topic which merely demands candid investigation, and fair argument.

Of the infected state of the Hankey, I never did, nor ever shall entertain the least doubt; nor do I recollect that any medical man in Grenada held an opposite opinion. During a residence of eighteen years in that island, I had frequent opportunities of seeing the yellow remitting fever; but I have not the least remembrance, that, at any period previous to the arrival of the ship in question, a suspicion even was entertained of its being contagious. During a lapse too of so many years, the state of the atmosphere, and the prevalence of marsh miasmata, must have frequently been as they were in 1793, and should consequently (the causes being the same) have produced similar effects.

Soon after the arrival of the Hankey, a fever appeared, attended by the symptoms so accurately detailed in the 6th chapter of your first volume. Those which always struck me as being peculiar to the disease, were, the appearance of the eye altogether, with the dilated pupil, and exquisite pain felt at the bottom of its orbit. The rapid fatal termination, too, often in 36 hours after its attack, I do not remember to have witnessed in the bilious remittent of tropical climates.

I was not present at the examination of Captain Cox by the Lieutenant-Governor; but I perfectly recollect its result being mentioned to me: namely, that he had kept the clothes and bedding of his passengers.

That those who had visited the Hankey brought the contagion into the town of St. George, and that it spread from thence into the country, I have as little doubt as I have of my present existence; and I really believe, that had the most determined anti-contagionist been present during that awful period, he would have become a proselyte to the general opinion.

At Martinique, in 1794, we suffered dreadfully from a fever in every respect similar to that which I had seen in Grenada, the preceding year. And in numberless instances, its contagious nature was manifested, by its attacking those who were, *immediately*, about the sick.

sick. We had, in the General Hospital at St. Pierre's, some hundred cases of it; and it is a melancholy truth, that very few of the attending medical officers survived the pestilent duty in which they were employed.

A most striking instance of contagion, among many others, occurred after the short sickness of the wife of a staff-surgeon. She arrived at Martinique from Barbadoes, and remained on-board the vessel a day or two before a lodging could be procured for her. In the mean time she dined with us once at the General Hospital, and returned in the evening to sleep in the ship. The day after, she was seized with the fever in question, and it terminated fatally within 48 hours of its attack. Her immediate attendants were four servants, and I was frequently with her during the day and night. The servants were speedily affected, and died within as short a period as their mistress; and I was the only one who survived of those who were about her person. The captain of the vessel (in which she came) with those who assisted in getting her out of the ship, and in conveying her to her lodgings, died a few days after her decease; and I was credibly informed, that, shortly after, the crew died to a man. I lay no stress, however, on this hear-say evidence; what I witnessed myself carried an indelible conviction to my mind of the highly contagious nature of the disease.

With regard to the supposed origin of the fever that raged in this garrison, and which carried off nearly five thousand persons, in the year 1804, I cannot say any thing of my own knowledge, but I have now before me a description of it, drawn up by a very acute and accurate observer, who was on the spot. He was present during the examination of a young man named Santos, who declared as follows: "That he arrived from Cadiz at Gibraltar, on the 25th of August, 1804; and that two days afterwards, he was seized with a fever, and that while he was ill, his mother, two of his aunts, a brother, and two sisters, who were in the same house with him, were taken ill also of fever, of which his mother and his aunts died on the 16th of September. He confessed, that, when in Cadiz, he was in a room with a person labouring under a fever." A person of the name of Pratts arrived also in the garrison, who had been ill of fever while living in the same house at Cadiz with Santos. He was the master cooper of the naval victualling yard, and of fair character. His examination was taken on oath, and what follows is an extract from it: "That he arrived at Cadiz on the 3d or 4th of August, 1804, and lodged in the tavern Del Sols, where he remained fifteen days. He was taken ill of fever, and continued so upwards of a week. That he had black vomiting. On his recovery his yellow appearance induced a captain of a vessel to refuse him a passage. That the captain of his own privateer, with himself, lived for many days in the same tavern with a man named Santos; and that he was in the same room with him when he (Pratts) was ill. That while he was in the tavern, several persons were ill. That he was attended after his removal from the tavern by a man to whom he gave some of his clothes; and that shortly after wearing them, he fell ill and died." The examination of Santos, and the above

above deposition, with the death of those in the house with Santos, convince me that the fever originated in this garrison from him; and from what I have heard since my arrival here, and from what I have seen of bilious remittent fevers, during two summers in the hospitals, I firmly believe, though in opposition to the opinions of very highly respectable medical characters, that the disease in this garrison in 1804 was contagious; and that its symptoms were similar to those which attended the fever of 1793, in the island of Grenada.

I know not what might formerly have been the state of the lower lands beneath this rock; but at present, as far as my observation goes, few places are less liable, I should think, to suffer from marsh miasmata, than Gibraltar.—*Edinburgh Med. and Surg. Journal.*

CRITICAL ANALYSIS

OF RECENT PUBLICATIONS

IN THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

Traite du Croup; par M. Double. Paris, 1811.

WE are indebted for this work to an order issued by the late Emperor of the French, to institute an inquiry into the nature and cure of the Croup. The treatise is preceded by a preliminary essay on what the author calls monographies, or histories of single diseases, and on the best mode of drawing them up. It contains many useful remarks, but which have not sufficient novelty for insertion here. The author then proceeds to give a general history of the disease, which he divides into five stages. The symptoms of the first of these are stated to be fretfulness, increased heat of the skin, and other slight febrile affections: occasionally convulsions, bleeding from the nose, eruptions, and inclination to sleep. This is properly the period which precedes the attack of the disease, and is observed generally to occur towards the evening. The second stage, or accession of the disease, is marked by a cough, at first dry, afterwards attended with the expectoration of small mucous filaments; by a change in the voice, it becoming small, hoarse, or almost entirely suppressed; by pain in the throat; and mostly an inclination to sleep, from which the patient is awakened by a peculiar fit of coughing: but sometimes there is on the contrary insomnolescency. The countenance becomes flushed and tumid, and the eyes appear watery. This stage is generally observed to occur in the evening and during the night—

night—it is subject to irregular remissions, and the exacerbations commonly take place at the same period. In addition to these symptoms, during the third stage, or what M. Double calls the stage of erudity, the head is thrown backwards, breathing becomes difficult in the extreme, and is accompanied by an indescribable sound, which is very peculiar, and easily recognised when it has once been heard; sometimes this sound occurs only in coughing or in speaking: the cough brings on nausea and unsuccessful efforts to vomit; the urine is limpid, and a puffiness (bouffissure) of the scalp, thorax, and abdomen, is observed. During the two last-mentioned periods, a considerable remission of the symptoms is frequently perceived, but this is followed by an attack of increased violence. This fallacious remission is not attended by any critical evacuations, and occurs before the symptoms of the next stage have attained their height. The fourth stage is named by the author the stage of coction: it is distinguished by the evacuation of membranous concretions, by coughing or vomiting, by the urine becoming turbid and depositing a lateritious or whitish sediment, and by convulsive paroxysms of coughing. The return of the voice and respiration to their natural state, an intermitting pulse, without any alteration of the intellectual faculties, announce the approach of death. The fifth is the stage of convalescence: it is not observed to take place at any particular day of the disease, but may occur indiscriminately from the first to the twelfth, being regulated by the progress of the previous stages. An habitual cough, a tendency to inflammatory affections of the thorax, to phthisis, and to ulceration of the larynx (the phthisis laryngea of Portal), are among the sequelæ of croup.

The results of the examination of the bodies of those who have fallen victims to this disease, is the next subject upon which the author enters: he refutes an opinion which some have advanced, that suffocation is always the immediate cause of death in croup, by a case which fell under his own care, in which the patient experienced every symptom of croup; after death, the brain and its meninges, and the thoracic and abdominal viscera, were found in a healthy state; the interior surface of the larynx, and upper part of the trachea, was lined with a whitish thready substance, a little thicker than common pus, but not of sufficient consistency to offer any material obstruction to the passage of the air; no portion of the peculiar membranous concretion of croup was found on any part of the trachea. Ghisi and Home have also related cases of the fatal termination of croup before the membranous concretion had formed.

In

In the greater number of cases, M. Double has found the lungs in a healthy condition, but he has met with some instances of inflammation, of effusion of serum, and collection of pus in that viscus. If the bronchiæ be examined in their minute ramifications, they are mostly found loaded with mucus, but sometimes the mucous membrane is inflamed and dry. In the larger branches the mucus possesses more tenacity; it adheres to the sides of the trachea, where it forms a pseudo-membrane, varying very considerably in colour, consistence, and strength of adhesion. This order is now and then reversed, the fluid mucus being met with in the trachea and larynx, and the membrane in the ramifications of the bronchiæ. The internal mucous membrane of the trachea and bronchiæ is sometimes red, dry, and inflamed; sometimes whitish, tumefied, and moist; but most frequently retains its natural appearance. The mucous glands are more prominent than under ordinary circumstances.

The author, with laudable minuteness, proceeds, in three sections, to the examination of the anatomical, physical, and chemical properties of the membranous concretions of croup, the substance of which is, that they are infinitely variable with regard to size, figure, consistence, and colour, and he believes them to consist of the inspissated mucus of the parts. This last conclusion appears to us a little questionable. None of the author's chemical experiments lead us to doubt that the composition of these concretions is principally albumen; and we think their formation is much more satisfactorily accounted for, by supposing them to consist of a species of coagulable lymph thrown off by the increased action of the vessels of the parts, than by the author's conjectures. He made a number of experiments upon animals, by making them breathe atmospheres of chlorine (oxymuriatic acid gas), carbonic acid gas, nitrous gas, sulphureous acid gas, hydrogen gas, &c. diluted with various proportions of common air; and, upon examining the trachea, he generally found the mucus of a thicker consistence than ordinary; but he seems quite as much at a loss as we are to find out what useful inferences are to be drawn from these experiments. If people were never attacked with croup, unless they had been obliged to breathe artificial gases, such experiments might have thrown some light upon the subject; but in the actual state of the two cases, the total want of analogy between them must be evident. M. Double, we think, deceives himself in supposing, that, because the effects which sulphuretted hydrogen and carbonic acid gas produce upon the system are said to be sedative, these gases are therefore incapable of producing irritation or inflammation

of the mucous membrane of the trachea. As far as our information extends, it appears most probable that all aeriform fluids which can be taken into the lungs, except atmospheric air, produce more or less irritation of the bronchial passages.

A disease very analogous to croup, has frequently been observed in animals. M. Double has collected many instances of this, and two epizootics fell under his own observation, one among cats, another among lambs, where the symptoms, as well as the appearances on dissection, had all the characters of this disease. Horned cattle, horses, pigs, and poultry, are occasionally liable to a similar affection.

We shall not attempt to follow the author through a long and elaborate analysis of almost every medical writer who has touched upon the subject of croup, from Hippocrates (whose pulmo repletus and angina gravissima he believes to be this disease) down to the present day, but shall content ourselves with taking a view of the general conclusions which he deduces from this examination. He does not consider croup as a new disease, but as one which has existed from the remotest periods: the diagnostic marks, however, have only recently been pointed out. He thinks that the cases of croup have not much increased in frequency, though more have been narrated lately, from the disease being more generally understood. It is met with in every climate, more particularly in places where the weather is cold and changeable. It is common in the northern parts of France. He denies the correctness of the observation, that it is peculiar to the sea coast. It is most frequent in the centre of the continent, and in some maritime situations is unknown. It appears in all seasons, but most commonly during cold and damp weather, or when sudden alternations from hot and cold take place. It most frequently attacks children between the periods of weaning and puberty; cases of it in children at the breast are very rare. In adults, it is still more uncommon, and the author hesitates to determine whether any of the recorded cases of supposed croup in them be instances of this or some other disease; but concludes that it has sometimes occurred. The number of each sex affected with this disease appears pretty nearly equal. There are no well-authenticated histories of croup which would induce us to consider it as having ever occurred as an epidemic, or that it is of a contagious nature. It is probable that a child who has once laboured under this disease is more liable to it afterwards when exposed to the exciting causes than another. Cases of croup are most frequently found to occur during a catarrhal epidemic, or during the

prevalence of a gangrenous sore throat. M. Double believes that the relative size of the larynx and trachea in children is one cause of their being peculiarly liable to this disease, joined to the greater secreting activity of the mucous membrane, and the want of power to spit at an early age. This, however, is rather a lame mode of accounting for the fact. Several diseases, he says, leave a predisposition to croup, particularly measles, hooping-cough, catarrh, and inflammatory affections of the throat.

The author next gives us a chapter on the synonyms of croup, and on the different diseases to which authors have applied this term.* He proposes that croup shall be in future exclusively employed to indicate this disease.

We have a very able article on the diagnosis of this disease, through which we shall follow the author pretty minutely. The acute spasmodic asthma of children, described by Millar and Rush, is one of the diseases most commonly confounded with croup. The age at which these two diseases are common is the same, and they both occur during the prevalence of the same weather; they are both sporadic diseases, and have many symptoms in common. But in this species of asthma the cough is dry; there is no expectoration either of viscid matter, or of the peculiar membrane of croup; the voice is altered, but it is hollow and dull (sourd), and generally wants the peculiar character which distinguishes croup; the disease is not attended with fever; the patient can hardly breathe during the fit, except in the sitting posture, and whilst bending the head forwards; the fits recur every six, twelve, or twenty-four hours with well-

* Cœlius Aurelianus, Asthma. Baillou, Morbus incognitus, affectio orthopnoica. Const. Lyem. 1576, Lib. 2. Etmuller Catarrhus suffocans. Angina Maligna of Marcus Aur. Severinus & Bartholin. Maloccin Cynanche Maligna. Ghisi Angina Stupitosa. Some of Starr's cases of Morbus Strangulatorius. Van Bergen, Morb. Strang. A few of Wallbom's cases of Angina Aphthosa. Schultz Suffocation Striduleuse. Wilcke confounds croup and malignant sore throat under Angina Infantum. Home, Turnbull, Brooke, Underwood, Middleton, &c. Suffocatio Stridula. Michaelis, Angina polyposa seu membranacea. Salomon, Back, Morbus Strangulorius. Bard, Angina Suffocativa. Brera, Angina Membranacea. Chambon, Esquinancie Membraneuse ou Croup. Lentin, Croup mequeux. Croup by the generality of English and French writers. Engstroem, Angina Sufferatoria. The popular synonyms are, in the western parts of Scotland, the chock or stuffing; in some parts of England, the rising of the lights; in Sweden, Stryp-sjuka; and in Germany, die beaune hattige.

marked intermissions in the intervals. In croup, fever is present, the remissions are very imperfect, respiration is the same in every position of the body, but the patient throws his head backwards as if to lengthen the neck. The progress of croup is more rapid than that of spasmodic asthma. The author elucidates these observations by some cases of the spasmodic asthma. The disease which our author terms Catarrhus pulmonalis vel suffocans, we suppose another species of asthma, bears the closest analogy to croup. It is a rare disease in children, but not unusual among adults. It is unaccompanied by the peculiar sound of the voice, and by the membrane of croup, and its attacks are not preceded by the symptoms of irritation and pain about the trachea and larynx, which always announce the last-mentioned disease. The line of demarcation between croup and hooping-cough is distinctively marked. The alteration of the voice in this last disease is to a deep and sonorous tone, only observed during the convulsive inspiration which attends the fit of coughing. The patient is well except during these fits; is free from fever; and the constitution generally is not much affected. The membranous expectoration is wanting. The hooping-cough is attended with a sense of tingling about the præcordia; the croup with pain of the larynx and trachea. The hooping-cough is epidemic; the croup is not. The different species of quinsey, particularly cynanche maligna, have often been confounded with croup. It can only be at the commencement of the disease that any doubt on this subject can occur. Cynanche maligna is generally epidemic, and attacks children and adults equally; there is difficulty and pain in swallowing from the first, and inflammation and ulceration of the tonsils, pharynx, &c. which do not take place in croup. The voice is hoarse, but wants the peculiar character of the voice of croup. Cullen has described croup under the title of cynanche trachealis, but has evidently included under that name another and a very different disease, from which M. Double next distinguishes it. It is an inflammatory affection of the pharynx, larynx, and upper part of the trachea, principally affecting adults. In this disease, the pain is acute and shooting; in croup, obtuse; and rather a sense of uneasiness than pain; in cynanche trachealis the secretion of the mucous membrane ceases, and consequently little or no expectoration takes place; on dissection, it is found red and inflamed; the voice has not the character of croup; and the symptoms experience no remissions. It is not probable that a foreign body should find its way into the trachea without the knowledge of the patient; but, if this should be the case, the symptoms may be distinguished

distinguished from those of croup by the suddenness of the accession, and the urgency of the disease, and by the absence of expectoration. Polypi in the trachea occasion but little pain, the symptoms come on very gradually, and the voice does not possess the character of croup. The points of resemblance between other diseases and croup are so few that they can give no difficulty to the practitioner.

The peculiar sound of the voice appears, then, to be one of the most characteristic marks of this disease, but still it is by no means sufficiently certain to be entirely depended upon. Home records a case of extraneous body in the trachea, in which the voice of croup was very well marked; and the same sound occurs sometimes in the spasmodic asthma, and the affection of the larynx which accompanies hydrophobia. Cases of croup have been met with and have proved fatal without this symptom. The sound itself is not sufficiently well marked and invariable to serve for a diagnostic symptom. It varies considerably with the degree of obstruction which the air meets with in its passage through the trachea, and with the part where the obstruction is situated. Neither is the membranous concretion to be considered as an infallible pathognomic sign of croup, as the author has collected some cases where it occurred in diseases of a widely different character, and some cases of croup, of which one or two terminated fatally, when the membrane was neither expectorated, nor could any traces of it be found on dissection.

We do not pretend exactly to comprehend our author's pathological ideas; nor can we take upon us to explain what he means by a catarrhal or nervous state of the constitution, nor by these *states* having a tendency to attack the trachea. Passing over some speculations on these subjects, we come to the practical division of croup into three distinct species, the catarrhal, the inflammatory, and the nervous. The first of these comes on with coryza and the general symptoms of catarrh well marked, followed, during the progress of the disease, by the expulsion of large quantities of mucous matter. The pain felt is obtuse; there is no tumefaction nor redness internally or externally; a quantity of mucous matter is generally present in the posterior part of the mouth. This is the species which is by far the most frequent, and which particularly depends on wet and cold weather: its progress is less rapid than that of the other species; the remissions are less distinct than in nervous croup, but more so than in the inflammatory species, and a marked exacerbation always comes on towards evening. The eyes are languid and humid, the countenance pale, perspiration considerable, and the expectoration of mucous matter and membranous concretions

cretions abundant. The inflammatory croup is next in frequency: its attack is more sudden; the pain is more acute and more violent, and is accompanied with a sense of heat; the dyspnœa, and indeed all the symptoms are more urgent; the voice presents a modification which it is impossible to describe; the face is red and inflamed; the remissions are less distinct; the progress of the disease is more rapid; and favourable terminations are more frequent in this than in the other species. As this species is most frequently observed in individuals of a robust habit, the patients usually possess sufficient power to expel the membranous concretions. The favourable termination is ordinarily preceded by sweats, and the lateritious sediment in the urine. The most prominent symptom of the nervous species is the tendency in the exacerbations to observe a certain period, with regular intermissions. The cough is drier, the oppression and agitation are more intense, the pulse is small and wiry, and convulsions, or other marks of the derangement of the nervous system, are occasionally present. On dissection, the membranous concretion is found dry, and free from mucus, and the air cells of the lungs are full of air. This species is very rare, and hardly ever met with except combined with one of the other species, or with some other disease.

The author next considers the combinations of these three species with one another, and with other diseases, with somewhat frivolous minuteness. All these combinations of diseases present only a combination of their respective symptoms, with the exception of small-pox and scarlatina, in which the periods of the eruption are considerably modified by the croup, appearing slower and later, and disappearing sooner than under ordinary circumstances.

It appears from the chapter on the prognosis in croup, that two thirds of the cases on record have terminated fatally. The prognosis may be favourable if the practitioner be consulted before the third or fourth day of the disease, if the pulse be then strong, though frequent, and if the change of voice be only observable when the patient coughs or cries, and the respiration not extremely difficult. The symptoms which will strengthen this prognosis as the disease advances, are a free expectoration, and undiminished energy of the vital powers. The more distinct the different periods of the disease, and the older the patient, the greater will be the chances of recovery. The cases in which the progress of the disease is rapid, more generally terminate favourably than protracted cases. A considerable degree of irritability of the trachea, joined with an unexausted state of the vital powers, furnishes a good indication. If called in late in the disease,

disease, if the pulse be feeble, and there be much general debility, with laborious respiration and frequent fits of coughing, the practitioner will give an unfavourable prognostic. A frequent, irregular, and intermitting pulse, particularly when accompanied with a sudden return of apparently natural voice and respiration, is a very bad symptom. The appearance of the sediment in the urine can only be considered favourable when accompanied by other symptoms of the decline of the disease.

The author has allotted a very inconsiderable portion of his work to the discussion of the prevention and cure of the disease. He justly observes that in this, as in many other diseases, the cases and circumstances frequently vary so much, that a precisely-similar plan of treatment can hardly be appropriate to two separate cases; and that the judgment of the practitioner must always accommodate the remedies to the individual disease which he has to treat. M. Double's practice may be, and we believe is, very good, but some of the reasons which he assigns for it, and his ideas respecting the operation of certain medicines, are at best very whimsical. In catarrhal croup, he recommends repeated emetics, particularly ipecacuanha, for the purpose of giving an increased degree of sensibility to the trachea, to assist in the expulsion of the mucous and membranous concretions. Stimulant liniments and blisters to the neck and other parts of the body, dry cupping and irritating clysters, are all to answer the same useful purpose. Carbonate of ammonia and of potash are also serviceable. Calomel would be an excellent remedy in this species, *and that because it is a moderate stimulant of the lymphatic system and mucous membranes*, if its action was not too slow to counteract the rapid progress of the disease. Seneka root is also of some utility in this species of the disease only, from its irritating action. Bleeding is injurious. The author has not found sulphuret of potash to succeed in the cases in which he has given it a trial. Bleeding, general and by leeches, is the appropriate mode of combating the inflammatory croup. Refrigerants, as nitre and simple oxymel, and gentle laxatives, internally, with emollient poultices and fomentations to the throat, should be had recourse to. Emetics do no good. In nervous croup, M. Double enumerates the whole class of antispasmodics, assafœtida, musk, camphor, opium, æther, castor, hemlock, amber, oxyde of lime, &c. Some cases have appeared to derive much benefit from the liberal use of milk. As M. Double before recommended stimulant liniments to increase the irritability of the trachea, &c. so he would now employ them to take off the spasm of the

the same parts. The inhalation of vapour, medicated with æther, opium, or cicuta, and pediluvia rendered a little irritating by the addition of mustard, are also said to be serviceable. In the complication of croup with small-pox, calomel is a medicine on which great reliance is to be placed, and is particularly to be given where there is any reason to apprehend that croup may supervene towards the termination of variola. Little is said with respect to prevention, except that exposure to the exciting causes is, of course, to be avoided.

The author concludes with some observations on the operation of tracheotomy, as recommended for the relief of croup. If, as he asserts, though we think without sufficient proof, the obstruction to the passage of air is *never* the cause of death, nor even of the most urgent symptoms, nothing further need be said upon the subject. But, as this is a point which we think by no means fully ascertained, we cannot at present join with him in this conclusion.

Expériences sur le Principe de la Vie, notamment sur celui des mouvemens du Cœur, et sur le Siége de se Principe, suivies du Rapport fait à la Première Classe de l'Institut sur celles relatives aux mouvemens du Cœur. Par M. LE GALLOIS, Doctor en Medicine de la Faculté de Paris, &c. &c. pp. 363. 8vo. Paris, 1812.

(*Concluded from vol. 31, p. 425.*)

HAVING ascertained in the preceding memoirs that life may be prolonged after the separation of the brain by substituting artificial for natural respiration, our author next proceeds to enquire what is the longest possible duration of life under these circumstances, and what are the causes by which death is ultimately produced. Setting aside the incidental causes which may have some share in producing this effect, such as hæmorrhage, &c. which must be considered as resulting from the bad success of the means employed for the preservation of life; there are two connexions by means of which the brain may exert an action upon the life of the trunk through the spinal marrow and the par vagum, and both these connexions are destroyed in decapitated animals. We have already seen, that the mechanical phenomena of respiration depend upon the integrity of the former of these; and M. le Gallois seems to come rather hastily to the conclusion, that in applying an artificial substitute for these phenomena after the division of the marrow, we remedy every defect arising from the loss of this connection; whilst he justly observes, that we cannot be supposed to supply the deficiency occasioned by the destruction of the latter.

His

His object, then, was to enquire into the effects produced by the loss of this latter medium of communication independent of any other injury. Before proceeding to the detail of his own experiments, he gives us a neat abstract of the opinions which other authors have entertained upon this question. Ruffus and Galen are the first writers to whom he refers; they only state that the effects produced by the division of the par vagum are drowsiness and loss of voice. Piccolhomini asserts, that it produces death, by putting a stop to the action of the heart. Riolan denied the truth of this opinion, and repeated the experiment and obtained a contrary result. Willis, who placed the vital principle of the organs of involuntary motion in the cerebellum, and imagined that these nerves formed the principal medium of communication, found, like other theorists, that experiments confirmed his preconceived ideas. The division of these nerves, he said, was followed by such irregularity of the motions of the heart, sooner or later, as to destroy the animal. He explained the difficulty that the effect was not more instantaneous and decisive, by supposing that the brain continued to exert some influence over the action of the heart through the great sympathetic nerves. A long list of authors who espoused different sides of the question, is given by M. le Gallois; some of whom added the division of the sympathetic nerves to that of the par vagum, and without perceiving that death was materially accelerated in consequence. It also frequently happened, that death was the immediate result of the division of the par vagum only. Some of these writers, among whom is Haller, looked for the cause of death to the stomach; and others again, considered the principal agency of the division to be upon the lungs.

Amongst others, Bichat performed this experiment, and particularly noted its effects upon respiration. It is amusing to observe how ingeniously he twists the simple facts to bring them to tally with his theoretical notions. After informing us that the animal continued to breathe with great difficulty till death took place, he labours to prove that these nerves possess no actual influence over the lungs. M. Dupuytien resumed the investigation, and from the results of several experiments on horses and dogs, was led to assign suffocation as the cause of death. He attributed the suffocation not to any mechanical obstruction to respiration, but to the loss of an imaginary nervous influence necessary to the action of oxygen upon the blood. It is not easy to perceive what could be his grounds for adopting this opinion. M. Dumas, of Montpellier, believed that the effect

was a mere mechanical obstruction to respiration, but he did not point out the exact nature of the obstruction. M. Blainville's experiments led him to agree with Haller, that the stomach was the organ principally affected. M. Provençal ascertained, that, after the division, the changes in the air respired were not effected to the same extent as before. Such was the state of opinions upon this question, when M. le Gallois took up the enquiry.

M. le Gallois had ascertained, by some previous experiments, that the length of time during which animals support deprivation of air, diminishes as the animals grow older. He was therefore much surprised to find that a puppy two days old died in less than half an hour after the division of the par vagum, whilst adult dogs survived the operation some days. He accidentally discovered, that the division of the recurrent nerves in a puppy two days old produced death in the same short period. Hence he was led to conclude, that the effects resulting from the division of the par vagum in the neck are generally much complicated with the effects of the division of the recurrents. As the recurrents are principally distributed to the larynx, he conceived that the division acted by contracting the opening of the glottis, and thus preventing the free access of air into the bronchia: he brought this opinion to the test of experiment, by making an opening into the trachea in young animals almost expiring in consequence of the operation, and found that the symptoms were instantly alleviated. The result of numerous experiments on dogs, cats, rabbits, and guinea-pigs, was, at the age of a few days after birth—the two former species only survive the division of the recurrents about half an hour; guinea-pigs of the same age about an hour; and rabbits some hours. Even in the last species, at this early age, death is produced as speedily by the division of the recurrents as of the par vagum. We wish particularly to impress upon our readers the age of the animal which is the subject of the experiment; as we believe it has been owing to want of attention to this circumstance, that doubts have occurred respecting some of M. le Gallois's conclusions. He states, that dogs and cats are not killed by the division of the recurrents after they have attained the age of three months. This circumstance is attributed to the proportional dimensions of the glottis varying at different ages.

To obviate some objections which were raised against his method of accounting for death after the division of the recurrents, the author made the following experiments. In rabbits two months old, he dissected out the larynx from the

the os hyoides and neighbouring parts without injuring its muscles or the recurrent nerves, and then drew it sufficiently towards the chest to shew the opening of the glottis. The glottis appeared round, or partially oval from above downwards, and enlarged and diminished synchronously with respiration. On dividing the recurrents or par vagum, the arytenoid cartilages approached one another, and the opening was much diminished. In dogs and cats the opening was nearly closed. On dividing the recurrent on one side, the arytenoid cartilage on that side was seen to fall in and remain motionless. He removed the larynx entirely with a portion of the trachea, into the divided extremity of which he introduced a syringe: the air driven out from the syringe readily escaped through the larynx; but, on moving the piston into the opposite direction, he experienced a resistance similar to what would have occurred from placing his finger upon the extremity of the syringe.

It has been supposed that these results contradict those obtained by M. Magendie in his experiments on deglutition, of which we gave some account in our last volume: but a little attention will shew us they are perfectly reconcileable. It must be recollected, that M. Magendie's experiments were avowedly made on the adult animal. The distribution of the recurrents is to the crico-arytenoidei muscles, whose exclusive operation is to enlarge the opening of the glottis, by removing the arytenoid cartilages from one another; and also to the thyro-arytenoidei, which will partly conduce to close the glottis anteriorly, by drawing the arytenoid cartilages forward. This last distribution explains the reason of the greater difficulty of deglutition in M. Magendie's experiments when the division of the recurrents was added to that of the superior laryngeal nerves. The morbid closing of the glottis in consequence of the paralysis of the first mentioned muscles in M. le Gallois's experiments on young animals, was, of course, a very different affection, and would be productive of different effects from its healthy constriction in the moment of deglutition.

It appears, then, that the effects of the division of the par vagum upon the viscera of the thorax and abdomen, are always more or less complicated with the effects of the division of the recurrents upon the larynx. M. le Gallois attempted to obviate these last effects by making a large opening into the trachea, though this was generally attended with accidents which materially interfered with the results. In the experiments which appeared least equivocal, he did not observe that the period which animals survived the division of the par vagum bore any proportion to

their age. The lungs, the stomach, and the heart, were all evidently affected; but none of them to such a degree that their functions are immediately suspended, except perhaps the stomach. The affection of the heart is indicated by a loss of fulness and strength in the arterial system, and want of regularity; it however is never so considerable as to be the immediate cause of death. The derangement of the stomach is much more considerable; indeed, its functions appear to be completely annihilated: but, as the animal almost invariably dies at an earlier period than would have occurred from total inanition, the cause of death must be sought elsewhere. M. le Gallois has never observed that putrescent state of the aliment in these animals, which some authors have described, and considered as the immediate cause of death. The stomach has sometimes presented slight appearances of inflammation, but this has rarely occurred. The affection of the lungs is the most constant and most urgent of the symptoms produced by this operation; it goes on increasing, respiration becoming more and more laborious till the animal dies. The lungs are found tumid with blood, but in distinct patches, so that portions of them, when thrown into water, will sink to the bottom. The bronchia are mostly filled with a frothy reddish serum. These appearances are very different from those which are observed after strangulation; but are very similar to what is discovered in people who die of a protracted affection of the chest with debility, particularly peripneumonia notha. The length of time which animals survive the division of the par vagum varies exceedingly. The extreme periods in thirty-two rabbits of different ages were six hours and a quarter, and eighteen hours and a half.

After decapitation, when artificial inflation of the lungs was practised, the same appearances were observed in the lungs. The serous effusion and bloody tumefaction took place more rapidly. Five hours and a half was the longest period that he was able to preserve rabbits alive after this operation. The general shock given to the nervous system probably accelerates death.

This memoir is followed by the report of the Committee of the National Institute, and some directions for the performance of the experiments more generally detailed in the memoirs. Three short notices on the dentition of rabbits and guinea-pigs; on the period of gestation; and on the relaxation of the joinings of the pelvis in parturition, of the latter, conclude this interesting volume.

The prosecution of these enquiries has afforded M. le Gallois the opportunity of ascertaining one or two points in

the natural history of rabbits and guinea-pigs, hitherto unnoticed. These two species have only one set of teeth, which are formed at first of a somewhat pyramidal shape, and are constantly and gradually protruding from the alveolar cells, so that the diameter of the tooth increases, as the upper part is worn down; thus accommodating it to the increased developement of the jaw. Rabbits possess a sixth molaris on each side of the upper jaw which has escaped the observation of zoologists. He has ascertained the period of gestation of the guinea-pig to be sixty-five days. He also found that in parturition, the symphysis of the pubis in the last-mentioned animals, was sufficiently separated to admit of the introduction of one or two fingers between the two bones; the sacro-iliac symphysis were also relaxed. Without a provision of this sort, it would be impossible for the head of the fœtus to pass through the pelvis, as the diameter of the former is nearly double that of the latter. The re-union of the symphysis takes place a few days after parturition.

Account of Baths, and of a Madeira-House, at Bristol: with a Drawing and Description of a Pulmometer; and Cases shewing its Utility in ascertaining the State of the Lungs in Diseases of the Chest. By EDWARD KENTISH, M.D. Physician to the Bristol Dispensary, and to St. Peter's Hospital. Longman and Co. 8vo. pp. 118. 3s. 6d.

THE utility of baths of various kinds, in promoting health, administering to luxury, and remedying disease, has long been acknowledged. Their adoption in this country, however, has been extremely partial, and their encouragement insufficient, the natural consequence is, that they are upon a parsimonious inconvenient scale; those which are used for cleanliness or pleasure, are constructed with little attention to excellence of plan, or pleasantness of effect; and those more especially appropriated to the diseased are too generally in the hands of ignorant and unqualified persons, who occasion mischief by misapplying a powerful remedy, and excite disgust by advertising the extraordinary cures which they pretend to perform. We are gratified then in observing, in the treatise before us, a regular physician devoting a considerable portion of his time and attention to this, in our opinion, important and much neglected means of cure, and hope that he will be rewarded by finding the institution which he has organised, realise his sanguine expectations. Dr. Kentish, some time ago, attempted to interest the public in a plan for establishing what he terms a Madeira-house, at Clifton, for the accommodation of invalids. The prospectus was warm, and the views it unfolded pleasantly

santly luxurious. The happy patient was to have been transported into a sort of fairy palace; without, indeed, was a variable atmosphere, and all the miseries of the English climate; but, within, the combined advantages of the steady climate of the south of France, and the genial climates of Naples or of Madeira. This Hygeian temple, which we think a finer name than a Madeira-house, was to contain more conveniences for the patient than he could possibly have in any other situation; and it was intended he should "avail himself in one spot, of all the scattered gifts of Nature, which the experience of ages has proved to be beneficial for the restoration of health." The calculation of expence for all these and many more delightful recreations and comforts, for which we refer to the prospectus, was only fifty thousand pounds, and the plan "was warmly espoused by a few zealous medical friends;" yet, *proh puder!* "it unfortunately happens that we live in a period when millions are lavished for the destruction of man, and a few thousands are with difficulty raised to benefit the species;" and the scheme was of necessity abandoned. Dr. Kentish therefore not meeting with the support he wished, has formed a private institution, which is under his immediate controul.

"The entrance into the baths is by folding doors, by a plain unornamented portico, which opens opposite to the east end of the Cathedral,—a large open area, very commodious for the access to the baths either by carriages, chairs, or on foot. The situation is extremely convenient, easily accessible to the inhabitants of Bristol, and to the visitors of the Hotwells and Clifton, who may have occasion to use the baths.

"The large room, in which the baths are placed, is thirty feet long, by twenty feet wide; the cieling is fifteen feet high; and the whole is lighted by a dome light from above.

"From the entrance at the portico, a few gentle and easy steps conduct into the servants' lobby, through which you pass into the bath room; this is divided by partitions, twelve feet high, into four small chambers, the remaining area forming a sort of waiting room,—large, well lighted, and provided with seats and a table, where the bathers may amuse themselves with a book until the bath is prepared; or, after the use of the bath, remain in a middle temperature, previously to exposing themselves to the air.

"In two corners of the room there are large reservoirs; they are placed close up to the cieling, and are inclosed by partitions; they contain each about four hundred gallons, the one of hot, the other of cold water, which is conducted by pipes into each of the bath rooms, terminating in the baths, which are made of copper, and japanned in such a manner as to imitate the verd antique marble. From each of the baths there is a waste pipe, which carries off the water, when done with in the bath—these unite into one common pipe, which conveys it through the water-closets of the house. Thus the bather sees

sees the water drawn fresh from the reservoirs for his own use, and may see it run to waste, if he chuses. By these means the impossibility of having a bath which has been used, is complete. Adjoining one of the warm baths, there is a shower bath, containing twelve gallons, which is charged with hot or cold water, at the wish of the patient. Into this bath also are conveyed the hot or cold douches.

"The warm water reservoir is provided with a false bottom, about two inches from the real one; between these two bottoms, a current of strong steam is thrown by the means of a small boiler, placed in a room below the bath room; the water above the false bottom absorbs the heat of the vapour, condenses it into water, which falls back into the boiler, where it again receives a proportion of heat, and carries it back to the false bottom. By this process the water becomes heated in the reservoir to about 150 degrees of Fahrenheit's thermometer; it probably might be carried higher. This is as high as I have had it, and is much more than an adequate heat for any purpose of bathing. The main steam pipe which passes from the boiler to the reservoir, goes through the vapour-bath room, from whence the steam is drawn, in any manner which may be required; it is made to pass in any direction, and may be impregnated with any substances that might be desired. The various vapour douches, jets, and other modes of locally applying this power to different parts of the body, are so arranged, as to be under the guidance of the assistant. This combination of local with the general use of the vapour bath, is capable of producing effects, which nothing less than having been a witness to them myself could have induced me to believe.

"In case the warm reservoir should have been too freely used, and the temperature should not be found equal to the required degree, each warm bath is provided with the means of being heated separately. One has a double bottom, between which steam is conveyed, which imparts its heat to the water, and may be thus raised to any temperature. The other warm baths are provided with a steam pipe, which descends to the bottom of the bath, and steam is thrown into the water, on the same principle as Count Rumford fitted up an apparatus for Mr. Gott, of Leeds."

Dr. Kentish's mode of heating the waters is ingenious. It is to be regretted, that the powers of steam have hitherto been so much neglected in their application to various domestic purposes in which they might be directed. Some useful hints may be derived from our author's suggestions. Several pages are occupied with an account of natural and artificial thermal waters, from which we extract the following passages for the attention of our readers.

"During the time of the French monarchy, it was the custom to send the maimed and crippled soldiers to Bareges, with a view of restoring to them the use of those limbs which had suffered from the hardships of war. When the revolutionary war raged, the number of these honourable victims increased in such abundance, as to preclude the possibility of affording them relief at the medicated springs.

Chemistry,

Chemistry, which had more than once been the saviour of the republic, was again put into a state of requisition. The chemists analysed the mineral waters at their sources, and indicated the means by which these natural productions might be imitated by art. The inspectors of the armies, Doctors Heurteloup, Parmentier, and Des Genettes, gave directions to the military hospitals to use factitious baths. These were prepared accordingly, and used under the same circumstances as the waters at their sources would have been used. In the year 1807, the inspectors drew up a report of this practice, shewing the result in several of the military hospitals.

"In the hospital at Toulon, seventy patients were submitted to the trial of factitious waters. Thirty-seven were much relieved; twenty-three were perfectly cured; and the remaining ten were in such a state as to preclude the expectation of relief. The hospitals at Rennes and at Lisle were not so fortunate in their number of cures. But, on the comparative scale of one hundred patients, treated by factitious mineral waters, and the same number at the sources of the natural medicated springs, the success of the former was fully equal to that of the latter."

Dr. Kentish then proceeds to inquire into certain analogies which exist between plants and animals, and details the opinions of Bichat, in supposing a combination of the animal with the vegetable organization. The effects of climate on vegetables and animals are explained; and from the numerous interesting facts which he has collected, the author concludes,

"1. That there is a great analogy between plants and animals.

"2. That plants, and the organic part of animals, are, in many instances, influenced by the same agents.

"3. That plants are entirely dependent upon climate.

"4. That an artificial climate may be prepared for plants, which will enable us to have any plants we wish, in any climate.

"5. That animals, as well as plants, are influenced by climate.

"6. That animals, as well as plants, suffer deterioration, disease, and death, from sudden and great changes of climate.

"7. That the salutary influence of an artificial climate is proved by our success in keeping exotics.

"8. That it is probable equal benefit would accrue to animals by an artificial climate; it would secure those who come from a southern zone, and would impart the genial influence of a more southern clime to the delicate and valetudinary of our own climate, who, from delicacy of structure, may be regarded as exotics."

This leads to the description of the Madeira-house, or Conservatory, which we have no doubt is well adapted for the purposes for which it is designed. In the appendix, an instrument called Pulmometer is described; it is for the purpose of ascertaining the power and capacity of the lungs to receive the atmospheric air, and seems a useful contrivance; but our account of it would not be complete without the etching which accompanies

accompanies it. Some cases are subjoined to prove the success of Dr. Kentish's plan.

We cannot doubt that, occasionally, benefit may be derived from the artificial life to which patients must be subjected in a hot-house; but we fear when once they enter the walls of the Conservatory, they incur the hazard of becoming, in constitution, like the exotics which form part of the beauties of the Hygeian temple.

Medico-Chirurgical Transactions, published by the Medical and Chirurgical Society of London. Volume the Fourth. 8vo. pp. 490.—Longman and Co. 1813.

(Continued from Vol. 31, p. 511.)

XII. *Observations on the Cataract.* By BENJAMIN TRAVERS, Esq. Demonstrator of Anatomy at Guy's Hospital, Surgeon to the Hon. East-India Company, and to the London Infirmary for Diseases of the Eye.*

IT is with much satisfaction that we find the name of Travers annexed to a paper on Cataract. The very extensive opportunities which that gentleman enjoys of making observations on diseases of the eye, and of contrasting the results of the different operations proposed for the removal of cataract, warrants us in raising our expectations of receiving much information from his remarks. The opinion of medical men respecting which operation is most eligible, is still so much agitated by doubts, and perplexed by controversies, that a careful and impartial record of the different results is still greatly to be desired. For, though the many publications on this interesting subject, which are already before the world, ought to have precluded the necessity for such a work, yet men engaged in altercations, and urged by motives of interest, are so apt to paint their favourite objects in too glaring colours, and either do not trace their failures at all, or place them so much in the shade, that they are obscured by the more prominent and dazzling figures in the foreground.

Mr. Travers commences with some observations on the probable causes of opacity, the most obvious of which is inflammation, which is manifested by accidental wounds penetrating the crystalline, and rendering that body opaque; and by inflammation of the membranes, induced by blows or other causes, being followed by cataract.

"A conformation of body favouring a determination of blood to the head," he considers as another cause of opacity

* Two articles immediately preceding this paper have been omitted in our Analysis by accident.

of the lens. This observation we think may be strengthened by the known fact of horses that draw with collars, which are often tight and press on the jugular veins, being particularly liable to blindness. He next observes that "a frequent exposure of the eye to the stimuli of heat and light in more than ordinary intensity, or the habitual vision of minute objects in a depending position of the head, by which an undue proportion of blood is thrown upon the organ, commonly induce opacity of the crystalline or of the retina; which in one species of amaurosis turns of a green yellow colour, and becomes distinctly visible." We admit that such causes are sufficient to produce an opacity of the crystalline, but we must hesitate in subscribing to their "commonly inducing" such an effect. The great power of accommodation in nerves is very remarkable, and it is a well-known fact that a person who has been long confined in a dark place, where only a few dim rays of light have been admitted, will be able to descry objects which would be perfectly invisible to another man who had been exposed to the full blaze of day, and vice versâ. By use, the eye, like any other organ, adapts itself to that degree of stimulus which is applied to it, and in time becomes as insensible to its intensity as under ordinary circumstances we are to the light of day. We should rather say that frequent and sudden alternations from light to darkness would be more injurious to the eye than the continued application of the same stimulus. The author proceeds with remarking that cataract frequently occurs in old people without any preceding inflammation. "Transparent parts (he says) obviously tend to become opaque in age, as may be instanced by the want of clearness of complexion in old persons, and the arcus senilis, as it is called, which is an opacity without inflammation encroaching upon the cornea. The very minute serous vessels of the crystalline run in the cellular substance which unites the lamellæ. This interstitial texture is probably absorbed in age, and the vessels may be gradually obliterated by compression; but this must be matter of conjecture." With this last observation we most cordially agree, and cannot refrain from lamenting that such vague and useless speculations should be mingled with real matter of fact. We decline making any further remarks on this passage, which has flowed with too much rapidity through the author's pen.

He next remarks that "Cataracts are formed in utero, and I have rarely observed in the subjects of congenital cataract other marks of deranged or defective organization: some other more subtle cause of opacity must, therefore, be admitted." We are glad to find no attempts to discover this

subtle cause, which from the preceding paragraph we somewhat dreaded.

Here follows some remarks on the various situation of cataract, and the mode of distinguishing their nature, which we insert at length.

"The cataracts of new-born children and of aged persons exhibit very opposite appearances. In congenital cases the opacity most frequently appears in the central nucleus, the interior denser structure demonstrated in the healthy lens by Petit, and is either stationary, or enlarges equally and slowly in a circle. This nucleus is sometimes not bigger than a pin's head in the centre of the transparent lens; but more commonly it is of the size of the contracted pupil, so that the child habitually knits his brows, or screens his eyes with his hand, to obtain that state of the pupil which he finds necessary to his vision. The fluid and capsular cataracts are exceptions to this observation. It is well known that adult subjects of cataract see better in moderate than in strong light, but in a much less degree; for the opacity is in them more diffused, so as very faintly, if at all, to exhibit a nucleus; and a dilatation beyond a natural one, I mean that obtained by the belladonna, though it enlarges somewhat the field of light, seldom permits of vision. The opacity commonly appears of equal consistency from the origin of the complaint, and in its progress the light is shut out from the whole sphere of the pupil. The hard cataract affords a partial exception to this remark, in which the nucleus, though imperfectly defined, is generally to be distinguished.

"The opacity is sometimes simply capsular, which is known by the uniform nebulous tenuity of the opaque membrane stretched over the transparent lens, and rendered more distinct by the dark tint reflected from the choroides. The cataract appears to be prominent in the pupil, which is sometimes slightly irregular. In this case, which is considered to be an incipient state of the cataract, as by the consequent opacity or absorption of the lens it becomes more dense and distinct, the quantity of light admitted is considerable.

"More frequently the opacity is simply lenticular, which is known by the cataract appearing more dense, voluminous, and varied in its colour and texture, and in relation to the plane of the iris, deeper seated; by the circularity of the pupil, and the greater degree of blindness in the natural state of dilatation. The motions of the pupil being regulated by the quantity of light which is admitted to the retina, its size depends upon the texture and bulk of the opaque lens, i. e. a very dense cataract keeps it dilated by excluding light from the retina; a very bulky one by mechanically distending it. In most cases of congenital cataract, and in some of mature age, the dilatation by belladonna discovers a defined margin to the opacity, and a transparent circle beyond it, and therefore adds considerably to the patient's perception of light. I have known patients in this state, who were of an age to judge for themselves, decline the operation, content with the vision they enjoyed by the use of the belladonna. In such cases, however, a tolerable vision has been previously enjoyed, owing to the smallness of the opaque nucleus compared with the transparent portion of the lens. And in all cases the vision of near objects is confused, if not totally bedimmed, by the enlargement of

the pupil with the belladonna, although that of distant ones is clear and distinct. Where a transparent circumference has been discovered after dilating the pupil by the belladonna, I have never seen the capsule opaque, and I believe this black rim may be considered as diagnostic of the transparency of the capsule. Where the lenticular opacity is diffused, this sign of a transparent capsule is of course wanting.

"The opacity is sometimes much deeper seated, so that you look at it through the transparent capsule and lens. It is here generally circumscribed, but irregularly shaped; and often, from its tenuity and depth of situation, escapes the observation even of oculists. This is usually considered to be a third seat of opacity, distinct from the former, viz. in the posterior covering of the lens. I do not find, upon repeated and strict examination, any proper capsule investing the lens, i. e. which admits of being removed with it. It may be necessary to a right understanding of this structure, briefly to describe it. The tunic of the vitreous humour advances to the ciliary body, there it separates into two laminæ, which, when contiguous to the margin of the crystalline, adhere closely to each other, forming the sacculated circle (canal godronné) described by Petit, which is capable of being inflated around the margin of the lens. This canal corresponds in breadth to the breadth of the ciliary processes, and is marked by them anteriorly. The anterior lamina, which is the more dense of the two, covers the crystalline in front; the posterior lines the fossula of the vitreous humour. There is no communication betwixt the canal of Petit, the vitreous humour, and the crystalline capsule. They are all distinct from each other, and must be inflated distinctly, if perfect. The crystalline, it will appear from this description, is incased in a duplicature of the vitreous capsule. The different texture of these laminæ adapted to their respective uses, (the one properly belonging to the crystalline, and supporting the whole lens in its place; the other proper to the vitreous, and covering a very small portion of the humour, which is sufficiently supported by the crystalline itself) and likewise the close investiture of the margin of the lens, which interrupts continuity, for it prevents the passage of air, explain why they are so seldom similarly affected in disease. The posterior opacity before described is therefore seated in the proper tunic of the vitreous humour. Thus much on the situations of the opacity forming cataract.

"The varieties of consistency, colour, and figure, are numerous. With regard to consistency, we have the fluid or milky, the flocculent or fleecy, the caseous or doughy, and the compact or hard cataract. The fluid lens is, I believe, rarely contained in a transparent capsule. The latter, in my experience, has been partially opaque, presenting a dotted or mottled surface. The capsule appears in contiguity with the margin of the pupil, and as if projecting in it, and the opaque spots upon it are most disguishable when it is viewed laterally. The second usually resembles, in appearance, flakes of snow irregularly heaped, being visibly of a loose and broken texture, and the larger masses intersected by semi-transparent lines: the arrangement is sometimes regular and uniform, being either foliated or radiated.

radiated. The capsule is sometimes semi-opaque, but more frequently transparent. The third is the cataract of greatest bulk, impeding the motions of the pupil, having a heavy and dense appearance, uniformly opaque, a clouded not a fleecy whiteness, and sometimes a greenish or dirty white tinge. The fourth appears deep seated, of a brown yellow, or amber colour, most dense in the centre; if entirely opaque, flat upon the surface, over which the iris plays freely. The second and third species are most commonly met with; the first and fourth are comparatively rare."

These observations are very valuable, as the result of much experience; but we doubt if these nice distinctions can always be so clearly established as to enable a practitioner to say with perfect confidence what the exact consistency of a cataract is previous to an operation. When this can be done, it is of much importance; for, as Mr. Travers very judiciously observes, the operation should be selected according to the nature of the case.

"To the first and second cases," he says, "*formerly regarded as incurable on account of their softness*, the operation performed by the late Mr. Saunders is admirably adapted. To the two latter the operation of couching or extraction is best suited." We must pause here for a minute to inquire what meaning the author attaches to the word "formerly." Does he refer to a period some centuries distant? or, as his next sentence would seem to imply, does the formerly relate to the time antecedent to Mr. Saunders, to whom the author seems to give all the credit of a perfectly-original operation? In looking back to the writings of Celsus, we find the following lines, after a most concise but clear account of the mode of securing the patient, and all the previous stages of the operation of couching: "Ubi eo ventum est inclinanda acus ad ipsam suffusionem est, leniterque ibi verti et paulatim eam deducere infra regionem pupillæ debet; ubi deinde eam transiit vehementius imprimi, ut inferiori parte insidat. Si hæsit curatio expleta est. Si subinde redit *eadem acu magis concidenda, et in plures partes dissipanda est: quæ singulæ et facilius conduntur, et minus late officiunt.*" Thus, then, we find that, eighteen hundred years since, the operation of breaking down the substance of the opaque lens was practised by Celsus. The limits of a review will not allow of our prosecuting our enquiries further, nor of tracing the rise and progress of this operation; but we cannot in justice pass over the accurate description of the late Mr. Pott, of the very operation proposed by Mr. Saunders.

"When the opake crystalline is in a state of dissolution, or the cataract is what is called perfectly soft, if the capsula of it be freely wounded by the couching-needle, the contents will immediately issue forth, and, mixing with the aqueous humour, will render it more or

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less turbid: sometimes so much as to conceal the point of the needle and the iris of the eye from the operator.

"This is a circumstance which has been observed by most operators, and has been mentioned by many writers: but it has always been regarded and mentioned as an unlucky one, and as being in some degree preventative of success; which is so far from being the fact, that as far as relates to this circumstance merely, all the benefit which can be derived from the most successful depression, or extraction, most frequently attends it; as I have often and often seen.

"The aqueous humour, however turbid it may become, will, in a very short space of time, be again perfectly clear; and, if no disorder of the capsula of the crystalline, previous or consequential, prevents, the rays of light* will pass without obstruction through the pupil,

* "The capsula, or investing membrane of the crystalline, has very often an unsuspected share in the apparent opacity of that body, and is thereby the cause of disappointments and inconveniences during some operations, and after others. This is a circumstance which, undoubtedly, has been mentioned; but has not been by any means sufficiently attended to. The capsula is capable of becoming white and opake, while its contents shall be clear and transparent; it becomes so sometimes by being wounded by the couching-needle, used either for the depression of a firm cataract, or for the letting out a soft one; and it will not infrequently be found so, after the operation of extraction, when no instrument has touched it.

"Whenever this happens, it is an unpleasant circumstance; but still more so if it continues for any length of time: I have seen it disappear in a week; I have seen it continue two, three, or four, and at last totally disappear; and I have seen it continue so long as to require the re-application of the instrument. When it appears after the depression of a firm crystalline, or after an unsuccessful attempt to depress one which has proved not firm enough, it may easily be, and generally is, mistaken for a portion of the cataract risen again; but from which an attentive observer will always be able to distinguish it. But, when such opacity follows what is called a successful extraction, in which the cornea only was divided, the capsula not touched by the instrument, and the cataract came away entire through the pupil, the case is self-evident.

"This may truly and properly be called, as it has been by Monsieur Houin, Haller, and others, a membranous cataract, as it consists merely of the membranous capsula of the crystalline.

"Writers of credit have mentioned, that a cataract may be formed almost instantaneously, by external violence. There is no doubt of the fact: I have seen it four different times.

"Whether this be not an affection of the capsula merely, I much doubt; or rather am much inclined to suspect that it most frequently is. In three of the four, which have fallen under my observation, the opacity has gradually disappeared after the inflammation, in consequence of the blow, had gone off, and the eyes were left as clear as ever—a consequence which, I think, may be accounted for, by supposing the opacity in the capsula only; but cannot, if we suppose it to be in the corpus crystallinum itself."

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and the patient will be restored to as perfect vision as could have followed the most successful operation of either, or of any kind in the same subject, and under the same circumstances.

"When the cataract is of the mixed kind, partly soft, and partly hard, the immediate effects of the needle are somewhat different; the soft part of the cataract being less in quantity as well as generally less soft, the aqueous humour is less turbid, and the firm part or parts of the crystalline will be very visible. In this state, these firmer parts will very frequently elude the attempts made by the needle to depress them, and will therefore remain in the posterior chamber. This is also reckoned among the unfortunate circumstances; but, although to an operator not aware of, nor acquainted with, the consequence, it may have all the appearance of being so, yet it really is not; the true end and aim of the operation not being thereby necessarily frustrated. In this case, if the needle has been so used as to have wounded the capsula very slightly, it will sometimes happen, that the firm part of the crystalline will remain in its nidus, and still form a cataract, which may possibly require a future or re-application of the instrument. This is the worst that can happen, and happens indeed very seldom; for if the capsula be properly wounded, so that the aqueous humour be freely let in, the firm part or parts, though very visible at first, and preventing the passage of light through the pupil, will in due time, in some longer, in others shorter, gradually dissolve, and at last totally disappear; leaving the eye as fair, as clear, and as fit for vision, as any the most successful operation could have rendered it; of which I have seen and exhibited many proofs.*

"In order to render the fact still more clear, I have sometimes, when I have found the cataract to be of the mixed kind, not attempted depression, but have contented myself with a free laceration of the

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* "The space of time which the accomplishment of such dissolution will require, is very uncertain; I have seen the eye perfectly fair and clear within a week after the operation; and I have seen it require two months for the dissolution of all the opake parts.

"This has been observed by many, even before the nature and seat of a cataract were truly known; among the rest, by Read, who, speaking of one of his own operations, says,

"'At the end of nine days I visited my patient, and found both her and her friends highly discontented, so that I met with nothing but invectives,' &c.

"'Within a fortnight after, when art and nature having performed their mutual operations, and all the cloudy vapours and rags of the cataract were consumed and dispersed, her eyes grew clear, and her sight became perfect,' &c.

"'I would have every patient, though after a cataract be couched, and nine or ten days expired, he see little or nothing at all, or that he cannot endure the light for a month or two, or even for a quarter of a year, as I have known many, not to be discouraged; for their sight may, notwithstanding, become well and perfect, and continue so ever after. On the other hand, some come to good and perfect sight within a fortnight or three weeks.'"—Sir W. Read, p. 7.

capsula;

capsula; and, having turned the needle round and round between my finger and thumb, within the body of the crystalline, have left all the parts in their natural situation; in which cases I have hardly ever known them fail of dissolving so entirely as not to leave the smallest vestige of a cataract.* In a few instances, where I have had fair opportunity, I have pushed the firm part through the pupil into the anterior chamber, where it has always gradually and perfectly dissolved and disappeared, not producing pain or trouble, while such dissolution was accomplishing." †

Let any impartial reader compare the above description with the operation proposed by Mr. Saunders, and he will be at a loss to say in what the latter gentleman's claims to novelty consist; except that he employed these means at a much earlier age than was recommended by Mr. Pott. We should be sorry to detract in the least from the reputation of the late Mr. Saunders, but cannot, as reviewers, permit such a gross plagiarism to pass unnoticed.

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* "The operation of extraction, though said in general to remove the crystalline entire, and calculated for such purpose, does not always do so; but, when the cataract is of the mixed kind, does not infrequently leave some of the firmer part behind, which, one of the warmest patrons of the operation allows, does dissolve and disappear. 'Extrahendum statim post operationem est quicquid remanet opaci ope Cochlearis Davielis. Hoc quidem facile sit aliquando, aliquando vero et imprimis ubi membrana crystallina non satis lacerata cochlear in ipsam capsulam lentis, ubi hæret illud opacum corpusculum non admittit, tantis difficultatibus circumfusum est, ut quicquid etiam molieris extrahere illud non possis, et ne oculum nimis irrites, desistere ab opere, et relinquere illud in oculo cogaris.

"'Neque tamen tunc etiam spe optimi successus destituimur. Sæpe enim observavi, opacum illud remanens, sive sit mucus, sive frustulum lentis crystallinæ, sensim, et sponte, citius vel tardius, penitus disparuisse. An resorbetur mucus lacteus, an frustula lentis crystallinæ liquescant sensim, et resorbentur, an in fundum oculi sensim, se præcipitant, dubium est. Utrumque tamen fieri credo. Quoties lactea materia post depressam cataractam totum humorem aqueum opacitate sua et albedine inficiens sensim penitus evanuit? Quoties pus in oculo hærens vel sanguis insigni quantitate in illum effusus, sensim resorptus evanuit? Quoties frustula lentis crystallinæ, post depressionem cataractæ, in pupillâ relicta? &c. immo liquescere aliquando et resorberi hæc frustula me ipsum experientia docuit.'" &c.—Richter de Cataractæ Extract.

† "I should be sorry to have it inferred from hence, that I would recommend the passing the opake crystalline through the pupil, far from it; I think it wrong, as it is apt to produce one of the most frequent inconveniences attending the operation of extraction—an irregularity of the pupil. I only meant to prove the fact of dissolution of the cataract in such situation; and that it will not cause that pain and trouble which it is so positively said to do."

There

There is an observation of Mr. Travers's, with regard to the fluid cataract, worth attending to; namely, that he has twice known severe inflammation arise from a "solid bed of lens, which had been contained in the fluid, being set at liberty by the laceration of the capsule and oppressing the iris." We do not find any other original matter in his observations respecting the fluid and soft cataracts. In firm and hard cataracts he candidly avows, that, after a trial of considerable length, he has ceased to employ the operation of Mr. Saunders, as he terms it. In this we most perfectly concur with the author, as we have long since foreseen the fate of this much-extolled operation for producing the absorption of the firm cataract *in situ*. The length of time requisite for a perfect restoration to sight, and the constant danger during this period of the lens falling forward and pressing on the iris, are sufficient reasons to deter us from ever attempting such an operation where the lens is firm and cannot be broken up by the needle.

The author abruptly breaks off at the most important and interesting part of the subject, and tells us, that in some future communication "he will point out the circumstances which should determine the election of couching or extraction in the two latter, *id est*, firm species of cataract." As this is the only interesting point on which we expected any elucidations, we cannot but feel disappointed with this distant prospect of what we expected to have met with in the present paper.

Before we conclude, we must make a few observations on an expression, of which we find Mr. Travers, in common with many other authors, makes frequent mention—we mean the solution of the opaque lens in the aqueous humour.

We are not aware of any experiments having been instituted to prove the solvent power of the aqueous humour; but, from what we know of its qualities, are much inclined to be sceptical on this subject.

As the operation formerly practised by Messrs. Travers and Saunders on the hard cataract, namely, the removing a portion of the anterior part of the capsule, and exposing the texture of the lens to the action of the aqueous humour, rest entirely on the supposed solvent power of this fluid, it will be as well briefly to consider what facts we are possessed of respecting its solutive qualities. To begin with the soft or milky cataracts: when the capsule is punctured the opaque fluid gushes out into the anterior chamber, and renders the aqueous humour turbid, which in a very short space of time will again become transparent. This at first sight does appear like solution, but, if we consider for one minute with

what astonishing rapidity the aqueous humour is replenished after being evacuated, we must suppose that there is a very considerable state of activity both in the exhalents and absorbents of the anterior chamber and iris, as we cannot suppose so great an increase in the healthy actions of a part to be suddenly set up. Clearly then the absorbents remove the opaque milky fluid, in common with the aqueous humour, through which it is diffused, but not dissolved. The same may be observed with regard to the soft flocculent portions of the second species, which are passed through the pupil into the anterior chamber, and are there rapidly absorbed. They come in contact with the same absorbents which are constantly employed in removing the aqueous humour. Where then, in this second case, is the necessity for referring to the solvent power of the aqueous humour? But, say the advocates for solution, the lens will be absorbed *in situ* if you open its texture to the action of the aqueous humour. This appears very plausible; but in reply we would observe, that in congenital cataract, after a time, the fluid part is absorbed within its capsule, and nothing but the dense membrane remains. Here, then, the absorbents of the capsule have been able to effect the removal of the fluid lens without calling in the aid of the aqueous humour: so also, in very old firm cataracts, we find the lens much shrunk and smaller than natural, arising probably from the absorption of the more soft parts. When a firm cataract is depressed and buried in the vitreous humour, in process of time it is absorbed; yet we do not hear of the solvent powers of the vitreous humour, which certainly is as much entitled to that property as the aqueous. From what has been observed, we conceive that the removal of the opaque lens, either *in situ* or when dislocated, does not depend on any solvent power in the humours, but on the absorbents of the capsule being excited by the operation, when the cataract is left *in situ*; and, when it is broken up or dislocated, its removal depends on its being separated from its natural connexions, and thereby rendered a foreign body, and acted on accordingly by the surrounding absorbents.

(To be continued.)

MEDICAL AND PHILOSOPHICAL INTELLIGENCE.

ROYAL SOCIETY.—On Thursday, he 12th of May, a paper by Dr. BENJAMIN HAYNE on the Indian method of oxydizing silver by means of the juice of jatropha cureas, and on the milk of plants, was read. A piece of silver is heated to redness, wrapped in the

the leaves of any kind of tree, and then quenched in the juice of the Jatropha moluccana. This process is repeated about twenty times, taking care never to fuse the silver. The metal becomes quite brittle, and crumbles to powder between the fingers. Dr. Heyne tried the same process, substituting water instead of the vegetable juice, and a similar effect was produced. From Dr. Heyne's account of the above process, Dr. Thomson suspects that the silver is not oxydized, but merely rendered brittle, and reduced to a fine powder; probably by combining with something which exists in the vegetable juice employed, or rather in the cow-dung in which the silver is heated. The only known oxide of silver is a dark greenish brown powder, which is reduced to the metallic state by a very moderate heat. If the vegetable juice merely communicated oxygen, it is obvious that that principle would be driven off every time the metal was heated to redness, so that the process would never advance; but if the vegetable juice or cow-dung employed supplied sulphur, or any analogous principle, we can see how the repeated heatings would facilitate the combination, and how fusion would retard it.

Linnean Society.—On Tuesday, the 24th of May, the Anniversary Meeting of the Linnean Society of London was held at the Society's house in Gerrard-street, Soho, for the election of a Council and Officers for the present year, when the following members were elected of the Council, viz.

James Edward Smith, M.D.	Thomas Marsham, Esq.
Samuel, Lord Bishop of Carlisle.	Wm. George Maton, M.D.
Sir T. G. Cullum, Bart.	Daniel Moore, Esq.
Philip Derbishire, Esq.	Joseph Sabine, Esq.
Mr. James Dickson.	Thomas Smith, Esq.
Aylmer Bourke Lambert, Esq.	William Smith Esq. M.P.
W. E. Leach, M.D.	Edward Lord Stanley.
Alexander Macleay, Esq.	

And the following were declared to be the Officers for the present year, viz.

James Edward Smith, M.D. President.

Samuel, Lord Bishop of Carlisle,
Wm. George Maton, M.D.
Thomas Marsham, Esq.
A. B. Lambert, Esq. } Vice-Presidents.

Thomas Marsham, Esq. Treasurer.

Alexander Macleay, Esq.
Mr. Richard Taylor, } Secretaries.

Wernerian Society.—On Saturday, the 5th of March, an interesting paper on the middle granite district of Galloway, was read by Dr. GRIERSON. It appears, from the doctor's observations, that this granite extends from eight to nine miles in one direction, and from three to four in another. It is coarse granular, sometimes porphyritic, but does not appear to be stratified. It is situate in the midst of distinctly stratified rocks, which on the east side of the

granite mass dip easterly, on the west side westerly, or in both cases away from the granite; out on the north and south ends of the mass, the ends of the strata run directly towards it. The rock which rests immediately on the granite is a particular variety of compact fine granular gneiss, and cotemporaneous veins of the granite are to be observed shooting from the granite into this variety of gneiss. The gneiss seems to be connected with greywacke and greywacke slate, which are by far the most frequent of the stratified rocks in this tract of country. Limestone, hitherto a desideratum in the transition rocks of Galloway, was discovered by Dr. Grierson, in greywacke, near to Dalmellington; and it is highly probable that *workable* beds of limestone will be found among the stratified transition rocks of Galloway. The doctor also described several beds of felspar-porphyry, which he noticed in the greywacke of this part of Scotland.

At the following meeting, Professor JAMESON gave an account of overlying primitive formations, as the first part of a dissertation on overlying rocks in general. From a series of observations which were made in the Highlands of Scotland, it appears that many of the primitive overlying sienite, granite, and porphyry formations of mineralogists, are not so in reality, but are thick conformable beds of these rocks which rise more or less above the surrounding strata. At the same meeting Professor Jameson described the Criffle district of granite and sienite, situate in the county of Galloway. These rocks occupy a considerable tract of country, and rise to the height of 1895 feet above the level of the sea; they are not distinctly stratified, and exhibit many interesting appearances, of apparent fragments, of cotemporaneous veins, and transitions into porphyry. The rocks which rest immediately on the granite or sienite are fine granular compact gneiss, slaty sienite, horneblende rock, and compact felspar rock. These rocks alternate with each other, and sometimes even with the sienite or granite; and cotemporaneous veins of granite are to be observed shooting from the granite into the adjacent stratified rocks. At the *Needle's Eye* on the west of Galloway, the Professor observed very fine examples of cotemporaneous veins and masses of granite, &c. in compact slaty felspar; and the felspar itself points out a hitherto unsuspected connection of this mineral with certain kinds of clay-slate. On these rocks rest greywacke and greywacke slate, and sometimes transition porphyry; and it would appear, from Mr. Jameson's observations, that there is an almost uninterrupted transition from the gneissy rock into greywacke; and that when the felspar of the greywacke increases very much in quantity, becomes compact, dark-coloured, and slaty, the greywacke at length passes into clay-slate.

Royal Medical Society, Edinburgh.—The Royal Medical Society propose as the subject of their Prize Essay for the year 1815 the following question:

"The comparative specific caloric of venous and arterial blood."

A set of books, or a medal of five guineas value, shall be given annually to the author of the best dissertation on an experimental subject proposed

proposed by the Society; for which all the members, honorary, extraordinary, and ordinary, shall alone be invited as candidates.

The dissertations are to be written in English, French, or Latin, and to be delivered to the secretary on or before the 1st of December of the succeeding year to that in which the subjects are proposed, and the adjudication of the prize shall take place in the last week of February following.

To each dissertation shall be prefixed a motto; and this motto is to be written on the outside of a sealed packet containing the name and address of the author. No dissertation will be received with the author's name affixed; and all dissertations, except the successful one, shall be returned, if desired, with the sealed packet unopened.

Kirwanian Society of Dublin.—Dec. 1, 1813. A paper "On the crystallographical Method of Haüy," by Dr. J. O. Reardon, was read.

In this paper a concise statement of the theory of the learned Abbé was given, and also of the principal arguments brought forward in its support. The objections that have been offered to the system by various philosophers, as well as the replies of the Abbé, were then noticed; and a number of observations were made on the validity of the former, and the adequacy of the latter.

March 23, 1814. A paper "On an extensive Bed of Magnesian Limestone, found in the vicinity of Dublin," by S. Witter, Esq. was read.

An account of the analysis and of some peculiar circumstances attending the calcination of the stone, was first given. 36 per cent. of carbonate of magnesia were found in combination with 51 of carbonate of lime; the remaining portion being made up by silex, oxides of iron, and manganese. After some geological observations, the paper concluded with some remarks on the application of the mineral to the purposes of practical husbandry.

The same gentleman likewise read a series of observations, with an account of some experiments relating to the formation and properties of iodine. In allusion to the question of its elementary nature, he referred to some striking similarities in certain well-known compounds.

Two years ago Mr. Want discovered the composition of a medicine which possesses the power of removing the paroxysm of Gout in a degree fully equal to the Eau Medicinale. Since that period he has had abundant experience to satisfy himself of the identity of the two medicines.

The first hint he obtained on this subject was derived from the writings of Alexander of Tralles, a Greek physician of the sixth century, whose book on Gout is one of the most valuable clinical records of antiquity, and who, in his chapter on Anodynes, remarks, that some persons take a medicine called *Dia Hermodactylum*, which produces an evacuation of watery matter from the bowels, attended with such relief from pain that patients are immediately able to walk. *But*, says he,

he, *it has this bad property, that it disposes them who take it to be more frequently attacked with the disease.** He speaks also of its producing nausea and loathing of food, and proceeds to describe the manner of counteracting its bad properties.—The effects here described are so similar to those resulting from the exhibition of the Eau Medicinale, that Mr. W. was led to hope that it might be the same medicine, or at least that it possessed powers of the same kind. The *Hermodactyl*, the basis of the composition, was strongly recommended by Paulus Ægineta as a specific for gout; and such was its reputation, that we are told by Quincy it had obtained the significant name of *Anima Articulorum*—the soul of the joints. He was further encouraged to think favourably of this medicine, from its having formed a leading article in the most celebrated gout-specifics of every age. Two of these are, Turner's gout powder, and the Vienna gout decoction, the latter of which is so strongly recommended by Behrens, in the *Ephemerides Naturæ Curiosorum*. It is likewise a fact notorious to every practitioner acquainted with the history of his profession, that this root has, at different periods, obtained considerable celebrity in the treatment of gout, though its general use has, after a time, been suspended; but that the occasional want of confidence in its powers arose less from its inefficiency than its misapplication, experience enables him to affirm.

The *hermodactyl* of the shops has been considered by most writers on the materia medica to be the root of the *Colchicum illyricum*; but some recorded accounts of the poisonous qualities of the *Colchicum autumnale*, and the manner in which death had been produced by it, induced Mr. W. to make his first trials with it, and his uniform success has rendered it unnecessary to make any change.

He directed a tincture to be made by infusing, for two or three days, a quantity of the fresh-sliced root of Colchicum autumnale, in proof spirits of wine, in the proportion of four ounces of the former to eight of the latter. This tincture he employed in all his first experiments, but as the efficacious parts of the plant are soluble in water or wine, either of these menstrua may be used; and, to produce a medicine more particularly resembling the Eau Medicinale in external circumstances, it is merely necessary to use good Sherry or Lisbon. Mr. W. purchased the root at Butler's, in Covent Garden, but it may be procured at all the physical herb shops, and under the vulgar name of *meadow saffron* may be found in every part of England.

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* πίνουσι δέ τινες καὶ τὸ ἡ ἑρμοδακτύλου καλούμενου, καὶ ἐνόδυνον φάσκουσι γίνεσθαι πᾶσι αὐτὰ, τῆς γαστρὸς ἰκανοῦσης ὑδροειδῆ τινα, ὃς καὶ βαδίζειν εὐθὺς δίδωσιν. καὶ ἴσῃ γε ἀληθὴς τοῦτο, καὶ σπανίως ἀπίτυχε τῆς ὠφελείας. ἀλλ' ἔχει τι καὶ βλαπτικὸν, ὅτι σπουδαίως ὑποπτεύεσθαι τοῦ ῥεύματισμοῦ τοὺς πίνοντας ποιεῖ.—ἅπαντες γὰρ οἱ ποσαγικοὶ αἰτιῶνται, κατ' ἐκείνην τὴν ἡμέραν τοῦ ῥήματος ἀνδρῶς ἔχειν πρὸς τὸ προσφερόμενα βρῶτα.

The following is the prescription of the medicine referred to:—

Γραφὴ παρασκευῆς τῆς ἡ ἑρμοδακτύλου ἁπλουστάτου.—Ἑρμοδακτύλου δραχ. α. γιγγιβέρεως κα. θ. πιπέρεως κα. ϛ αὐτοῦ κα. β. ταῦτα πάντα μία δόσις. αἱ δὲ θῆλυς ἐπὶ πλέον ἀπάγειν τὴν γαστέρα, προσμίγνυε σκαμμωνίας κα. δ. καὶ ἀνύπνους καθαίρει, καὶ ἀνωδύνως ποιεῖ τοὺς πάσχοντας.

Alex. Trallian, cap. xi.—περὶ ποδάγρων ἀλλοίων καὶ φαρμάκων παραγτικῶν.

procured

For medicinal purposes, a recent infusion of the fresh or dried root in water is equally efficacious. Mr. W. has made extensive trials with this watery infusion, and never been disappointed in its effects. He was led to employ the dried root, from observing its variable strength when fresh, in which it appears to be much influenced by the weather and the season of the year. After rain, it contains a large quantity of water; but, on the contrary, after much sunny weather, the watery parts of the plant are evaporated, and the active qualities more condensed.

The dose of the tincture, whether it be made with water, wine, or spirit, should be the same, and should vary according to the constitution of the patient. Upon an average, we may fix two drams, or two ordinary tea-spoonfuls, as the proper quantity for an adult.

The wine of white Hellebore has been supposed by some to be the French medicine. At a very early period of the promulgation of this opinion, Mr. W. spared no pains to ascertain how far it was founded in fact. He has employed hellebore in every possible form. In some cases it appeared to be possessed of efficacy, but a series of disappointments induced him to abandon it as a medicine on which no dependence can be placed. In its mode of operation it has some properties in common with the Colchicum, or meadow saffron, but in its power of curing gout it falls infinitely short of it.

It is proper to state, that Mr. W.'s experiments have already been made in at least FORTY cases, followed by results of the most satisfactory nature, the paroxysms being always removed, and, in several instances, no return of disease having taken place after an interval of several months.

Mons. JUDELOT has published a recipe for a sulphurated soap, which he conceives to possess peculiar advantages and facilities in the cure of the itch. He prepares it, by dissolving six ounces of pulverized sulphuret of potass in a third of its weight of water. Two pounds of white soap are then to be rasped and put into an earthen vessel placed in a water bath; to which is to be added, gradually, two pounds of almond oil, triturating it well with the soap as it is added. The solution of sulphuret of potass is then to be put into a marble mortar, and well rubbed with the mixture of oil and soap, adding the latter very gradually. Two pounds of almond oil and two drachms of any agreeable essential oil are then to be added; and the mixture will be complete. This liniment should be kept in a close vessel, and used by rubbing an ounce of it upon different parts of the body, particularly those affected, twice a day. It rarely fails to cure the itch in eight days. It possesses the advantages of having no disagreeable odour, of not irritating the skin, and of preserving the patient's linen uninjured. It is cheap, and may be preserved for almost any length of time.—*Bulletin de la Faculté de Medicine.*

The same bulletin contains an account, by Mons. CHAUSSIER, of a case of small-pox, in which variolous pustules were found on the mucous membrane lining the trachea. The patient died apparently suffocated. The author concludes this notice by observing, that, in the same dissection, he was unable to inject the umbilical vein from

the umbilical arteries; but mercury introduced into the umbilical vein passed after some lapse of time into the veins of the uterus. He attributes this not to a direct communication by continuity of canal between the fœtal and maternal veins, but to the transudation of the mercury through the membranous septum. He seems to think that the use of the umbilical arteries is the nourishment of the placenta.

Mons. Brisé Fradin has contrived an apparatus by means of which persons employed in atmospheres deteriorated by metallic or gaseous impurities may be prevented from breathing their noxious vapours. It consists in a cylindrical case of tin, open before, and fitted to a tube of glass at the upper extremity. The other end of the glass tube is to be introduced into the mouth, a little cotton placed in each nostril, and the tin cylinder, filled with moistened cotton, secured to the breast. Inspirations are then to be made through this apparatus, and expirations into the open air. Metallic vapours will be detained by the moistened cotton only, but if the noxious gases are to be avoided, it will be necessary to impregnate the cotton with some chemical agent, as ammonia, when chlorine is to be avoided. This contrivance appears adapted only to those cases when the exposure is of no long duration.

Mons. Chatelain has analysed a calculous concretion found in the jejunum of a man of sixty years of age. Contrary to the usual composition of biliary calculi, it contained no adipocire, nor yellow matter. It consisted of oxalate of lime and animal matter in the following proportions:

Water - - - - - - - -	·10
Inspissated bile - - - - -	·02
Green matter - - - - -	·08
Oxalate of lime - - - - -	·80
	1·00

We have observed with regret, in the French Journals lately received, the death of M. Le Gallois, the ingenious author of the Expériences sur le Principe de la Vie, an account of which we have concluded in the present Number of our Journal. We need not state how greatly physiology is indebted to the labours of this active experimentalist. A biographical memoir is announced in the Bulletin of the Faculty of Paris, which we hope soon to be able to lay before our readers.

Dr. Wigard, of Hamburgh, has discovered an excellent remedy in *Croup*. It consists in administering, according to the age and constitution, every hour, from two to three, or even from four to five grains of calomel, with the addition of half a grain, or at the most, one grain of moschus, to be continued till vomiting occurs. This vomiting happens in general after the use of the powders alone, and in most cases after the third dose; and (not, as has been asserted by most practitioners, a tough and white mucus, but) a substance of the consistency of cream of a greenish-yellow hue, is brought up, similar to

to that which children bring up towards the latter stage of the hooping-cough, or such as is met with in the windpipe and bronchiæ of those children who have died of the angina. The earlier this vomiting sets in, the more certain and speedy is the cure. After this stage, Dr. W. ordered the powders to be given every two or two hours and a half, and a syrup of Oxym. Scillæ. Syrup. Senegæ, Ammonia Muriata, and Vin. Antimon. Huxh. from two to three teaspoons full every hour or every hour and a half, in order to promote the vomiting and still more loosening the rising mucus.

A fœtus has been taken from the abdomen of a boy sixteen years of age, by Mr. Highmore, of Sherborne, Dorsetshire. The head and one of the lower extremities appear to have been removed by absorption, which process has commenced in some other parts. From the neck grows a quantity of hair twelve inches in length, and loose portions of it were found in the sac. The umbilical cord was connected with one part of the sac, there being no placenta. The patient during his illness was supposed to labour under diseased spleen, and died of hæmorrhagy from the stomach and bowels. We understand an account of the case, with engravings, will shortly be published. About six years ago, the account of a similar case was read to the Medico-Chirurgical Society, and has since been published in the first volume of their Transactions.

M. Bucholz has recently analyzed a new bitumen found in the environs of Halle in Saxony, which he thinks strongly resembles the *resino asphaltum* described by Mr. Hatchett some years ago in the Philosophical Transactions. According to M. Bucholz, that which is found at Halle is compused of two resins, one of which is very soluble in alcohol, and approaches to the vegetable resins, forming 91 parts of the bitumen; while the other, which forms nine parts, has some analogy to amber.

The following are a few of the most characteristic marks of this substance: It is found in balls the size of an apple, enveloped in gray crystallized gypsum; in colour it is brownish, or pale yellow; fracture glossy, and very brittle: it does not become soft under the fingers; it even does not melt so easily as other resins, but while melting it exhales an agreeable smell, something like that of animal resin and styrax. M. Bucholz remarks that, as Mr. Hatchett could dissolve only 55 parts of the bitumen examined by him, while the former dissolved 91, it is extremely probable that this difference was occasioned by Mr. Hatchett's using common alcohol.

The nine grains which were insoluble in alcohol were dissolved, but with much difficulty, in boiling oil. It was fusible in a strong heat, and gave out the smell of common resin.

The 91 parts above mentioned, when separated from the alcoholic solution, were dissolved by ether, and formed a brownish tincture, while ether of a specific gravity of 0·710, rectified over muriate of lime, made scarcely any impression. Oil of turpentine and rectified petroleum have little or no effect upon this resin. Caustic potash dissolved in two parts of water does not dissolve this resin; but,

when the lixivium is decanted, the residue of the resinous principle is dissolved in water, from which we can separate the resin by the addition of muriatic acid.

Dr. SPURZHEIM will give a Course of Lectures on the Physiology of the Brain, or on the Organs by means of which the Faculties of the Mind manifest themselves, at his Rooms, No. 11, Rathbone-place, Oxford-street, on Monday the 11th of July next. He will comprise the whole in ten lectures, which will begin at two o'clock in the afternoon precisely, on Mondays, Wednesdays, and Fridays.

According to the report of several *Apothecaries* residing in various districts of the metropolis, the following was the average of the diseases in London between April 20th and May 19th:—

Anasarca	30	Enterodynia	20	Pemphigus	1
Ascites	4	Enuresis	1	Paralysis	24
Asthma	76	Epilepsia	13	Phthisis Pulmonalis	36
Acne	5	Epistaxis	2	Pertussis	44
Apoplexia	10	Febris remittens	103	Peritonitis	14
Aphtha	7	—— intermittens	31	Phrenitis	7
Amenorrhœa	33	—— puerpera	9	Pneumonia	76
Asthenia	31	Gastritis	7	Pleuritis	18
Abortio	14	Gastrodynia	38	Podagra	15
Atrophia	2	Hæmatemesis	6	Porrigo larvalis	6
Bronchitis acuta	10	Hæmoptoe	13	—— scutulata	12
—— chronica	20	Hæmorrhois	32	—— favosa	2
Cancer	2	Hepatitis	43	Psoriasis	29
Chlorosis	23	Hysteria	27	Purpura	2
Cholera	20	Hysteritis	3	Pyrosis	11
Chorea	1	Hydrocephalus	13	Prurigo	1
Cephalalgia	56	Hydrothorax	6	Rheumatis. acut.	73
Colica	18	Herpes	20	—— chron.	106
—— Pictonum	1	Hypochondriasis	15	Rubeola	189
Catarrhus	254	Icterus	22	Scabies	74
Convulsio	20	Impetigo	4	Scarlatina simplex	24
Carditis	4	Ischuria	9	—— anginosa	26
Cynanche Tonsillaris	99	Leucorrhœa	28	—— maligna	6
—— maligna	4	Lithiasis	3	Scrofula	32
—— Trachealis	10	Lepra	3	Synochus	2
—— parotidea	6	Lichen	6	Tabes Mesenterica	14
Diabetes	3	Lumbago	1	Typhus	11
Dysenteria	18	Mania	10	Variola	27
Diarrhœa	110	Menorrhagia	57	Varicella	16
Dyspnœa	22	Miliaria	3	Vermes	32
Dyspepsia	126	Morbi Infantiles	161	Vertigo	37
Dysuria	5	—— Biliosi	149	Urticaria	26
Ecthyma	1	Morbus Pediculosus	1		
Eczema	4	Nephritis	4	Total	2967
Erythema	3	Obstipatio	41		
Erysipelas	37	Odontalgia	1		
Enteritis	8	Ophthalmia	50		

The Deaths in the Bills of Mortality from April 12th to May 10th, 1814, according to the returns of the *Parish Clerks*, were as under:—

Males	661
Females	617
Total	1278

LONDON

LONDON PRICES OF DRUGS.

(To be continued regularly.)

	£	s	d.	£	s	d. per	
Aloes Barbadoes, from	20	10	0	to 21	0	0	C.
—— Cape	10	0	0	11	0	0	—
—— Succotrina	20	0	0	0	0	0	—
—— Epatica or E. I.	14	0	0	16	0	0	—
Angelica Root	9	10	0	9	15	0	—
Alkanet Root	6	0	0	0	0	0	—
Antimony Crude	3	15	0	3	0	0	—
Aqua Fortis	S.	0	8	D.	1	1	lb.
Arrow Root fine	0	2	0	0	3	6	—
—— ordinary	0	1	0	0	1	6	—
Arsenic Red	3	0	0	0	0	0	C.
—— White	2	17	0	3	0	0	—
Balsam Capivi	0	6	0	0	6	3	lb.
—— Peru	1	0	0	1	1	0	—
—— Tolu	0	14	0	0	14	6	—
Bark Jesuits', Com.	0	3	6	0	4	0	—
—— Second	0	6	0	0	7	0	—
—— Quil or best	0	8	0	0	10	0	—
—— Red	0	7	0	0	10	0	—
—— Yellow	0	4	0	0	5	0	—
Borax refined E.I.	none.						
—— English	0	3	9	0	4	0	lb.
—— unrefined or Tibc.	10	0	0	11	0	0	C.
Camphire refined	0	8	9	0	9	0	lb.
—— unrefined	28	0	0	32	0	0	C.
Cantharides	8	10	0	0	9	0	lb.
Cardamoms (best)	0	7	0	0	12	0	—
Cassia Buds	36	0	0	}	0	0	C.
—— Fistula W.I.	6	10	0	} in bond			—
—— Lignea	25	0	0	}	0	0	—
Castoreum American	2	10	0	3	15	0	lb.
—— Russia	11	0	0	0	0	0	—
Castor Oil per Bottle 1½ lb.	0	3	9	0	4	3	lb.
Cocculus Indicus	6	0	0	7	0	0	C.
Colocynth Turkey	0	5	0	0	5	6	lb.
Columbo Root	4	15	0	6	0	0	C.
Cream of Tartar	6	10	0	7	10	0	—
Gallangal East-India	5	0	0	0	0	0	C.
Gentian Root	3	5	0	3	6	0	—
Ginseng	0	1	6	0	0	0	lb.
Grains of Guinea	6	6	0	6	10	0	C.
Gum Ammo. Drop	30	0	0	0	0	0	—
—— Lump	8	0	0	9	0	0	—
—— Animi	3	10	0	7	10	0	—
—— Arabic E. I.	2	0	0	4	0	0	—
—— Turkey Fine	10	10	0	14	14	0	—
—— Barbary	7	7	0	8	0	0	—
—— Assafœtida	10	0	0	15	0	0	—
—— Benjamin	8	10	0	35	0	0	—
—— Cambogium	20	0	0	26	0	0	—
—— Copal, scraped	0	3	0	0	4	6	lb.
—— Galbanum	16	0	0	20	0	0	C.

Price of Vials per Gross.—8 oz. 70s.—6 oz. 58s.—4 oz. —½ oz. 24s.

OBSERVATION

At recent Sales of Merchandize by Auction, Mr. J. 12 chests Tolpha Manna, 2s. 6d. to 2s. 7d. per lb.—Cream of Tartar, 6l. 15s. to 7l. 12s. 6d. per cwt.—42 chs. per cwt.

Gum Guaia							
—— Mastic							
—— Myrrh							
—— Olibar							
—— Oppop							
—— Sandr							
—— Senec							
—— Traga							
Jalap							
Ipecacuanh							
Isinglass Bo							
—— Ea							
—— Li							
—— Sh							
Manna Fla							
—— Sici							
Musk Chin							
Nux Vomic							
Oil of Vitr							
Opium Ea							
—— Tu							
Pink Root							
Quicksilve							
Rhubarb E							
—— R							
Saffron Sp							
—— Fr							
Sago							
Sal. Amm							
Sarsaparill							
Sassafras							
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Senna							
Seeds An							
—— Cor							
—— Cum							
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Shellack							
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Snake Re							
Soap Cast							
Spermace							
Tamarin							
Tapioca							
Turmeri							
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Verdigris							
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Vitriol							
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Amaurosis	33	—— puerpera	9	Pneumonia	70
Asthenia	31	Gastritis	7	Pleuritis	18
Abortio	14	Gastrodynia	38	Podagra	15
Atrophia	2	Hæmatemesis	6	Porrigo larvalis	6
Bronchitis acuta	10	Hæmoptoe	13	—— scutulata	12
—— chronica	20	Hæmorrhois	32	—— favosa	2
Cancer	2	Hepatitis	43	Psoriasis	29
Chlorosis	23	Hysteria	27	Purpura	2
Cholera	20	Hysteritis	3	Pyrosis	11
Chorea	1	Hydrocephalus	13	Prurigo	1
Cephalalgia	56	Hydrothorax	6	Rheumatis. acut.	75
Colica	18	Herpes	20	—— chron.	106
—— Pictonum	1	Hypochondriasis	15	Rubeola	188
Catarrhus	254	Icterus	22	Scabies	74
Convulsio	20	Impetigo	4	Scarlatina simplex	24
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LONDON

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(To be continued regularly.)

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Aloes Barbadoes, from	20	10	0 to	21	0	0	C.
—— Cape	10	0	0	11	0	0	—
—— Succotrina	20	0	0	0	0	0	—
—— Epatica or E.I.	14	0	0	16	0	0	—
Angelica Root	9	10	0	9	15	0	—
Alkanet Root	5	0	0	0	0	0	—
Antimony Crude	2	15	0	3	0	0	—
Aqua Fortis	8.	0	8	D.	1	1	lb.
Arrow Root fine	0	2	0	0	3	6	—
—— ordinary	0	1	0	0	1	6	—
Arsenic Red	3	0	0	0	0	0	C.
—— White	2	17	0	3	0	0	—
Balsam Capivi	0	5	0	0	6	3	lb.
—— Peru	1	0	0	1	1	0	—
—— Tolu	0	14	0	0	14	6	—
Bark Jesuits', Com.	0	3	6	0	4	0	—
—— Second	0	6	0	0	7	0	—
—— Quil or best	0	8	0	0	10	0	—
—— Red	0	7	0	0	10	0	—
—— Yellow	0	4	5	0	5	0	—
Borax refined E.I.	none.						
—— English	0	3	9	0	4	0	lb.
—— unrefined or Tinc.	10	0	0	11	0	0	C.
Camphire refined	0	8	9	0	9	0	lb.
—— unrefined	28	0	0	32	0	0	C.
Cantharides	8	10	0	0	9	0	lb.
Cardamoms (best)	0	7	0	0	12	0	—
Cassia Buds	36	0	0	0	0	0	C.
—— Fistula W.I.	6	10	0	} in bond			—
—— Lignea	25	0	0	}	0	0	—
Castoreum American	2	10	0	2	15	0	lb.
—— Russia	11	0	0	0	0	0	—
Castor Oil per bottle 1½ lb.	0	3	9	0	4	3	bo
Cocculus Indicus	6	0	0	7	0	0	C.
Colocynth Turkey	0	5	0	0	5	6	lb.
Columbo Root	4	15	0	6	0	0	C.
Cream of Tartar	6	10	0	7	10	0	—
Gallangal East-India	5	0	0	0	0	0	C.
Gentian Root	3	5	0	3	6	0	—
Ginseng	0	1	6	0	0	0	lb.
Grains of Guinea	6	6	0	6	10	0	C.
Gum Ammo. Drop	30	0	0	0	0	0	—
—— Lump	8	0	0	9	0	0	—
—— Animi	3	10	0	7	10	0	—
—— Arabic E.I.	2	0	0	4	0	0	—
—— Turkey Fine	10	10	0	14	14	0	—
—— Barbary	7	7	0	8	0	0	—
—— Assafœtida	10	0	0	15	0	0	—
—— Benjamin	3	10	0	35	0	0	—
—— Cambogium	20	0	0	25	0	0	—
—— Copal, scraped	0	3	0	0	4	6	lb.
—— Galbanum	16	0	0	20	0	0	C.

	£.	s.	d.	£.	s.	d.	per
Gum Guiacum, from	0	2	6 to	0	3	0	lb.
—— Mastic	0	4	6	0	4	9	—
—— Myrrh	15	0	0	18	0	0	C.
—— Olibanum	6	0	0	7	0	0	—
—— Oppoponax	80	0	0	0	0	0	—
—— Sandrac	9	0	0	10	0	0	—
—— Seneca Garbled	5	2	0	5	5	0	—
—— Tragacanth	36	0	0	38	0	0	—
Jalap	0	5	0	0	5	3	lb.
Ipecacuanha	1	0	0	1	1	0	—
Isinglass Book	0	10	6	0	11	0	—
—— Leaf	0	10	6	0	11	0	—
—— Long Staple	0	10	6	0	11	0	—
—— Short Staple	0	10	6	0	11	0	—
Manna Flakey	0	5	5	0	5	6	—
—— Sicily in Sorts	0	4	0	0	4	3	—
Musk China	0	18	0	1	0	0	oz.
Nux Vomica	8	0	0	8	10	0	C.
Oil of Vitriol	0	0	3½	0	0	0	lb.
Opium East-India	1	2	0	1	3	0	—
—— Turkey	1	9	0	1	10	0	—
Pink Root	0	4	0	0	4	6	—
Quicksilver	0	4	10	0	0	0	—
Rhubarb East-India	0	6	0	0	10	0	—
—— Russia	0	18	0	1	0	0	—
Saffron Spanish	2	5	0	2	10	0	—
—— French	1	15	0	2	0	0	—
Sago	7	0	0	8	0	0	C.
Sal. Ammoniac	10	10	0	11	0	0	—
Sarsaparilla	0	3	0	0	3	6	lb.
Sassafras	7	0	0	8	0	0	T.
Scammony Aleppo	1	6	0	1	7	0	lb.
—— Smyrna	0	10	0	0	12	0	—
Senna	0	3	0	0	3	6	—
Seeds Anni Alicant	6	0	0	6	10	0	C.
—— Coriander English	1	10	0	1	16	0	—
—— Cummin	7	0	0	7	10	0	—
—— Fenugreek	1	10	0	1	13	0	—
Shellack	7	10	0	10	0	0	—
Sticklack	6	0	0	8	0	0	—
Snake Root	0	0	0	0	0	0	lb.
Soap Castile or Spanish	12	0	0	14	0	0	C.
Spermaceti refined	0	2	0	0	0	0	lb.
Tamarinds West-India	8	10	0	9	0	0	C.
Tapioca Lisbon	0	0	8	0	1	0	lb.
Turmeric Bengal	5	10	0	0	0	0	C.
—— China	6	10	0	7	0	0	—
—— West-India	8	0	0	9	0	0	—
Verdigris Wet	0	3	6	0	0	0	lb.
—— Dry	0	4	6	0	0	0	—
—— Crystallized	0	8	0	0	0	0	—
Vitriol Roman	0	0	7	0	0	0	—
—— Foreign white	2	18	0	3	0	0	C.

Price of Vials per Gross.—8 oz. 70s.—6 oz. 58s.—4 oz. 47s.—3 oz. 43s.—2 oz. 36s.—1 oz. 30s.—½ oz. 24s.

OBSERVATIONS.

At recent Sales of Merchandize by Auction, Mr. J. Twemlow sold, on the 22d of June, 12 chests Tolpha Manna, 2s. 6d. to 2s. 7d. per lb.—19 bags Sago, 105s. per cwt.—6 casks Cream of Tartar, 6l. 15s. to 7l. 12s. 6d. per cwt.—42 chests Bologna Argol, 5l. 5s. to 5l. 17s. 6d. per cwt.

Monthly Prices of SUBSTANCES *used in* PHARMACY,

At Messrs. SELWAY and HENLEY's (Chemical and Pharmaceutical Laboratory,) 35, Upper Mary-le-bone Street, Portland Place.

Acetum Scillæ	lb.	2s.	0d.	Cambogia opt.	9s. 6d.
Abietis Resina		2	3	Camphora	9 6
Acaciæ Gummi		2	3	Canella Cortex	3 4
—— elect.		3	3	Cardamomi Semina opt.	12 0
—— Pulvis		3	8	Cascarillæ Cortex	7 0
Acidum Aceticum	cong.	3	8	Castoreum	unc. 4 4
—— Benzoicum	lb.	6	0	Caryophilli	11 0
—— Boracicum		£4	0	Cassia Cortex	8 0
—— Oxalicum		20	0	Catechu Extractum	2 3
—— Nitricum		4	6	Cetaceum	3 0
—— Nitrosum		2	6	Cera flava	3 6
—— Muriaticum		0	8	—— alba	3 0
—— Sulphuricum		0	6	Ceratum Cetacei	3 0
—— Arom.		5	0	—— Resinæ	2 8
Alcohol sp. gr. 815	M. lb.	5	6	—— Calamina	3 0
Æther sulphur. sp. gr. 789		10	0	—— Plumbi superacet.	4 0
—— rectificatus sp. gr. 744		12	0	—— Lyttæ	4 0
Ærugo	lb.	7	0	—— Sabinæ	2 8
Aloes spicatæ extractum		5	6	—— Plumbi Carb.	3 0
—— vulgaris extractum		4	6	—— Comp.	3 8
—— Barbadoes		5	0	—— Saponis	4 6
Alumen		0	4	Cinchonæ cordifoliæ Cortex (yellow)	9 0
—— exsiccatum		0	8	—— lancifoliæ Cortex (quilled)	18 0
Ammoniæ Murias Ang.		2	0	—— oblongifoliæ Cortex (red)	16 0
—— Exot.		2	2	Cinnamomi Cortex	16 0
—— Carbonas		3	6	Coccus (Coccinella)	64 0
—— Nitras		5	6	Colocynthidis	8 0
Amygdalæ Amaræ		2	0	Copaiba	7 0
—— Dulces		5	8	Colchici Radix	3 7
Ammoniacum (Gutt.)		6	6	Cornu usti	1 0
—— (Commun.)		3	6	Cretæ ppt.	0 8
Anthemidis Flores (com.)		1	9	Croci stigmata	64 0
—— (opt.)		2	0	Cupri sulphas	1 0
Antimonium		3	0	Cuprum ammoniatum	6 0
Antimonii Sulphuretum		1	0	Curcuma Pulvis	2 6
—— Aurum. Sulph.		7	0	Cuspariæ Cortex	4 0
—— Oxydum				Confectio Aromatica	8 6
—— Murias		3	9	—— Aurantii	2 9
Antimonium Tartarizatum		5	0	—— Opii	4 6
Aqua Anethi	cong.	3	0	—— Rosæ Gallicæ	1 10
—— Calui		3	0	—— Caninæ	2 0
—— Cinnamomi vera		18	0	—— Scammoniæ	15 0
—— Menthæ piperitæ		2	6	—— Sennæ	2 0
—— pulegii		2	6	—— Amygdalæ	5 0
—— Sativæ		2	6	Emplastrum Ammoniaci	8 0
—— Pimentæ		2	9	—— Cumini	2 0
—— Rosæ		5	6	—— Galbani Comp.	2 6
—— Cassiæ		3	6	—— Lyttæ	6 6
Arsenici Oxydum	lb.	1	0	—— Opii	3 6
Argenti Nitras		6	9	—— Plumbi	1 6
Assafœtida Gummi-resina		6	9	—— Resinæ	1 6
Aurantii Cortex		2	6	—— Roborans	2 0
Balsamum Peruvianum		33	0	—— Saponis	2 6
—— Tolutanum		15	0	—— Hydrargyri	2 6
Barytæ Murias		6	0	—— cum Amm.	6 0
Benzoinum elect.		11	0	Extractum Anthemidis	unc. 1 0
Bismuthum		3	0	—— Belladonnæ	1 0
—— Oxydum		16	0	—— Cinchonæ	3 0
—— Nitras		16	0	—— resinosa	4 0
Calaminæ præp.		0	3		
Calumbæ Radix		2	6		
Calx		1	0		

Extractum Colocynthidis	2s.	0d.
——— comp.	1	0
——— Conii	0	6
——— Gentianæ	0	5
——— Glycyrrhizæ .. lb.	3	0
——— Cascarillæ .... unc.	3	0
——— Hæmatoxyli	0	5
——— Humuli	0	9
——— Hyoscyami	1	0
——— Jalapæ 1s. 6d. Res.	2	8
——— Opii aquos	3	8
——— resinos	3	0
——— Papaveris	0	6
——— Rhæi	2	4
——— Sarsaparillæ	0	10
——— Taraxaci	0	6
Ferri carbonas lb.	0	9
—— sulphas	1	0
Ferrum Ammoniatum	3	6
——— Tartarizatum	4	0
Galbani Gummi-resinæ	7	6
Gentianæ Radix	1	3
Guaiaci Resina	6	0
Hydrargyrus purificatus	5	6
——— cm Creta	4	0
Hydrargyri Oxymurias	8	0
——— Submurias	8	6
——— Hydros.	10	0
——— Nitrico-Oxydum	8	6
——— Oxydum Cinereum	16	0
——— Rubrum	5	0
——— Sulphuretum Nig.	3	6
——— Rub.	8	0
——— Præcipitatus Alb.	8	0
Hellebori nigri Radix	2	6
Ipecacuanhæ Radix	22	0
——— Pulvis	23	0
——— Compos. Pulv. lb.	8	0
Jalapæ Radix	6	0
——— Pulvis	6	6
Kino	12	0
Liquor Plumbi Acetatis M. lb.	1	0
——— Ammoniæ .... P.L.	2	8
——— Arsenicalis	3	0
——— Potassæ	0	9
——— Vol. Corn. Cerv.	1	3
Linimentum Camphoræ comp.	5	6
——— Saponis comp.	5	6
Lichen Islandicus ..... P. lb.	1	9
Lini Semines	0	6
——— Pulvis	0	4
Lytæ	13	6
Magnesia	8	6
——— Carbonas	3	0
——— Sulphas	1	3
Manna optima	8	6
——— communis		
Mel Rosæ	2	6
——— Despumat	3	0
Mices Moschatæ	25	0
Moschus pod, 24s. in gr. unc.	40	0
Mastiche lb.	5	6
Myristicæ Nuclei	25	0
Myrrha elect.	6	6
Olibanum	3	0
Opoponax	23	0

Opium (Turkey)	34s.	0d.
Opium (East India) lb.	32	0
Oleum Amygdalæ lb.	5	4
—— Anisi unc.	2	6
—— Anthemidis	5	0
—— Cinnamomi Cassiæ	8	0
—— Caryophilli	5	6
—— Cajuputi	8	6
—— Carui	1	3
—— Juniperi	0	9
—— Lavandulæ	4	6
—— Lini cong.	8	6
—— Menthæ piperitæ unc.	4	6
——— viridis	3	0
—— Olivæ opt. cong.	30	0
——— secundum	18	0
—— Origani unc.	2	0
—— Pimentæ	4	6
—— Ricini optim. (per bottle)	10	0
——— secund.	7	0
—— Rosmarini unc.	0	9
—— Succini 2s. 4d. rect.	2	6
—— Sulphuratum lb.	1	6
—— Terebinthinæ rectif.	2	0
Oxymel Scillæ	3	0
Papaveris Capsulæ (per 100)	2	4
Plumbi Carbonas lb.	0	8
——— Superacetas	2	2
——— Oxydum semi-vitreum	0	6
Potassa Fusa unc.	0	6
——— cum Calce	1	6
Potassæ Nitras lb.	1	6
——— Acetas	8	0
——— Subcarbonas	1	2
——— Carbonas	4	6
——— Sulphas	1	0
——— Sulphuretum	1	6
——— Supersulphas	3	6
——— Tartras	3	0
——— Supertartras	2	0
Pilulæ Hydrargyri	6	0
——— Aloes comp.	8	0
——— cum Colocynth.	16	0
——— Saponis cum Opio	18	6
——— Scillæ Compos.	6	6
——— e Styrace	48	0
Piper longum	2	6
—— Nigrum lb.	2	6
Pimento lb.	2	6
Pulvis Aloes cum Canella	6	6
——— Compositus	10	0
——— Antimonialis	7	0
——— Cinnamomi Comp.	16	0
——— Cornu cervi cum Opio	16	0
——— Cretæ Composit.	8	0
——— cum Opio	9	0
——— Kino Compositus	12	0
——— Scammoniæ Comp. unc.	2	6
——— Sennæ Composit. lb.	8	0
——— Tragacanthæ Comp.	5	0
Resina Flava	0	5
——— Nigra	0	5
Rosæ Folia	10	6
Ras Quassiæ	1	6
Rhæi Radix (Russia)	50	0
——— (East India)	14	0

Rhei Radix Pulvis	15s.	0d.
Sapo (Spanish)	2	6
Sarsaparilla Radix Inc	5	0
Scammoniæ Gum Resina unc.	2	6
Scillæ recens	1	3
—— siccata	5	0
—— pulvis	6	0
Senegæ Radix		
Sennæ Folia Opt. Alexand.	6	6
Serpentariæ Radix	30	0
Simaroubæ Cortex	4	0
Sodæ Boras	4	6
—— Carbonas	7	0
—— Subcarbonas	1	4
—— exsiccata	2	8
Sinapis super.	2	6
—— secund.	2	0
Sodæ Sulphas	0	8
—— Phosphas	2	8
—— Acetas unc.	0	10
Soda tartarizata lb.	2	4
Spongia usta unc.	1	3
Spiritus Ammoniæ M. lb.	4	0
—— aromaticus	4	6
—— fœtidus	3	6
—— succinatus	4	6
—— Cinnamomi ver.	3	6
—— Juniperi Compos.	3	0
—— Lavandulæ	4	6
—— Compos.	5	0
—— Myristicæ	3	0
—— Pimentæ	3	0
—— Rosmarini	3	6
—— Ætheris Aromaticus	6	0
—— Compositus	6	0
—— Nitrici sp. gr. 860	5	6
—— Sulphurici	6	0
—— Vini rectificatus	28	0
Syrupus Aurantii	1	8
—— Rutæ	1	8
—— Papaveris	2	0
—— Violæ	2	10
—— Rhei	2	10
—— Rhamni	2	0
—— Croci	3	0
—— Tolutanus	2	0
—— Rheados	2	0
—— Mori	2	6
Sulphur	0	6
—— Lotum	1	6
—— Præcipitatum	1	0
Tamarindus opt.	2	6
Terebinthina Vulgaris	0	9
—— Canadensis	8	0
—— Chia	6	0
Tragacantha Gummi	10	0
—— Pulvis	10	6
Tinctura Aurantii M. lb.	3	9
—— Aloes	4	0
—— Composita	9	6
—— Assafœtidæ	5	6
—— Balsa. Tolut.	5	6
—— Benzoini Comp.	6	9
—— Camphoræ Comp.	4	0
Tinctura Cardamomi	4s.	0d.
—— Comp.	4	0
—— Calumbæ	3	9
—— Capsici	3	9
—— Cascarillæ	4	6
—— Castorei	7	0
—— Catechu	4	0
—— Cinchonæ	6	0
—— Compos.	6	0
—— Cinchonæ Ammon.	7	0
—— Croci	6	6
—— Digitalis	4	6
—— Ferri Ammoniati	4	0
—— Cinnamomi	4	6
—— Comp.	4	6
—— Gentianæ Comp.	4	6
—— Guaiaci	6	0
—— Ammon.	6	0
—— Hellebori Nigri	4	6
—— Humuli	5	0
—— Hyoscyami Nig.	4	6
—— Jalapæ	4	6
—— Japonica	4	6
—— Ferri Muriatis	5	0
—— Kino	5	0
—— Lyttæ	3	9
—— Myrrhæ	4	6
—— Opii	7	0
—— Camphorat.	4	6
—— Quassiæ	3	9
—— Rhei	4	6
—— Comp.	4	0
—— Scillæ	4	6
—— Sennæ	4	9
—— Serpentariæ	6	0
—— Valerianæ	4	6
—— Amm.	5	6
—— Zingiberis	4	6
Valerianæ Radix	1	8
Veratri Radix	1	6
Unguentum Hydrargyri fort	5	4
—— Mit.	3	0
—— Nitratis	3	3
—— Nitrico-oxy.	2	9
—— Sulphuris Comp.	1	9
—— Sambuci	2	0
—— Virio	1	8
—— Altheæ	2	0
—— Cetacei	3	6
—— Veratri	1	8
—— Zinci	2	6
—— Hyd. præcip. Alb.	3	0
—— Picis	1	6
Uvæ Ursi Folia	2	4
Vinum Aloes	3	6
—— Antimoniale	3	0
—— Ferri	3	6
—— Ipecacuanhæ	5	6
—— Opii	8	0
Zinci Oxydum	4	0
—— Sulphas purif.	2	0
—— Acetas unc.	1	6
Zincum lb.	1	6
Zingiberis Radix opt.	2	4

Bourdeaux Leeches, per dozen, 4s.—French ditto, true, 7s.—English ditto, true, 12s.

METEOROLOGICAL REGISTER.

From May the 25th, to June the 25th, 1814.

Kept by C. BLUNT, Philosophical Instrument Maker, No. 38, Tavistock-Street, Covent-Garden.

Moon.	Day.	Wind.	Barometrical Pressure. Max.	Min.	Mean.	Temperature. Max	Min	Mean.	
☽	26	N	29·96	29 94	29·95	58	38	45·66	Fair
	27	NW	29·90	29·77	29·83	65	44	53·3	Fair
	28	NW	29 71	29 65	29·675	69	44	53·3	Fair at Night
	29	N	29·94	29·80	29·862	70	45	56·6	Fair
	30	N	30 07	30·07	30 07	56	48	52	Fair
	31	E	30 03	30·—	30·017	68	44	57	Fair
	1	SE	30·03	29·90	29·955	67	47	55	Rain
	2	SW	29·87	29·84	29·862	68	49	57·3	Rain
○	3	SE	29·81	29·72	29·747	67	44	55 6	Rain
	4	SE	29·86	29·76	29·792	62	43	51 6	Rain
	5	E	30.17	30·01	30 135	60	43	51 3	Cloudy
	6	NE	30·10	30·07	30·112	60	42	51	Cloudy
	7	SE	30·02	30·—	30·—	58	40	49·6	Cloudy
	8	E	30·—	29·95	29·957	60	44	52·3	Fair
	9	EbyS	30·06	30·01	30·042	59	40	51 6	Fair
◐	10	E	30·08	30·02	30·065	61	42	64·6	Fair
	11	SE	30·08	29·93	29 975	64	45	56·3	Fair.
	12	W	30·—	29·80	29·9	72	49	60	Fair
	13	SE	30·10	29·97	30·032	69	58	6' 6	Rain
	14	SW	30·07	30·02	30·057	76	60	67 6	Fair
	15	SW	29·92	29·86	29·89	80	53	67 60	Rain
	16	SW	30·—	29·93	29·962	76	40	59 6	Small Rain a.m. Fair p.m.
●	17	NW	30·10	30·04	30·072	70	42	57·3	Fair
	18	N	30·09	30·09	30·09	69	46	58	Rain
	19	NW	29·85	29·82	29 835	68	48	58 6	Fair Showery
	20	N	29·82	29·70	29·75	67	47	5	Fair Cloudy
	21	N	29·83	29·70	29·785	59	48	57·3	Fair Cloudy
	22	E	29·99	29·89	29 947	58	48	57	Cloudy
	23	NW	30 16	30·05	30·105	57	47	52·3	Cloudy
◐	24	NW	30·28	30·17	30·313	57	45	51 6	Cloudy
	25	NW	30·26	30·25	30·25	57	50	54	Cloudy

RESULTS.

Mean barometrical pressure	29·688	Mean temperature	55 96 deg.
Maximum	30·28 wind at NW	Maximum	80, the wind at SW
Minimum	29·65 —— NW	Minimum	38, —— N

Scale exhibiting the prevailing Winds during the Month.

N	NE	E	SE	S	SW	W	NW
5	1	6	6	0	4	2	7

	Mean barometrical pressure.	Mean temperature.
From the first quarter on the 26th May, to the full moon on the 3d June	29·902	54·89
—— full moon, to the last quarter on the 10th	29·969	51·71
—— last quarter, to the new moon on the 17th	29·983	62·47
—— new moon, to the first quarter on the 24th	29·91	56·35

Observations.—The only observation of importance to make, is on the general low temperature of the month, and the blight which prevails.

On the 14th, the first thunder-storm of the season occurred, with considerable severity. Lightning was vivid and frequent during the whole evening in the SW., and a heavy storm came on from the same quarter at about three, a. m. of the following morning; heavy rain accompanied it, and the thermometer rose during the storm from 59 to 67 degrees, falling to the former temperature at its close.

Measles and hooping-cough are very prevalent. Rheumatism and inflammatory sore-throat have not been unfrequent; and the class of pulmonary affections, notwithstanding the advanced period of the season, is still considerable.

List of Diseases in June, in the Practice of Dr. Fothergill.

Rubeola 10	Cephalalgia 4	Diarrhœa 4
Pertussis 3	Vertigo 2	Hæmorrhagia 2
Cynanche Tonsillaris 2	Paralysis 1	Dysuræ 1
Urticaria 1	Delirium Ebriosum .. 1	Ascites 1
Catarrhus 6	Asthenia 7	Amaurea 3
Phthisis Pulmonalis .. 3	Gastrodynia 4	Hydrothorax 1
Tussis et Dyspnœa ..19	Enterodynia 2	Angina Pectoris 1
Pleurodyne 4	Colica 2	Herpes 2
Lumbago 2	Dyspepsia 3	Porrigo 1
Rheumatismus Acutus 3	Pyrosis 1	Psora 6
——— Chronicus 5	Hernia 1	

MONTHLY CATALOGUE OF MEDICAL BOOKS.

ELEMENTS of Medical Jurisprudence; or, a succinct and compendious Description of such Tokens in the Human Body as are requisite to determine the Judgment of a Coroner, and of Courts of Law, in Cases of Divorce, Rape, Murder, &c. To which are added, Directions for preserving the Public Health. By Samuel Farre, M.D. Second Edition. 12mo. boards. 5s.

An Essay on Bronchitis; with a Supplement: containing Remarks on Simple Pulmonary Abscess, &c. &c. By Charles Badham, M.D. Physician of the Household to his Royal Highness the Duke of Sussex, formerly Physician to the Westminster General Dispensary, &c. &c. Second Edition, corrected and enlarged. 12mo. boards. 5s.

TO CORRESPONDENTS.

We are sorry that Dr. H.'s Letter came too late to be attended to.

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Medical and Physical Journal.

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" For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly " Journals; and there never existed any work to which the faculty in " EUROPE and AMERICA were under deeper obligations than to the " Medical and Physical Journal of London, now forming a long, but an " invaluable series."—RUSH.

For the Medical and Physical Journal.

Remarks on the Case of Inflammation of the Abdominal Viscera; by Mr. AXBRIDGE.

A CORRESPONDENT has communicated a case to the Public, through the medium of the Medical and Physical Journal for May, which does not excite astonishment by any peculiarity of symptoms, so much as by a strange peculiarity of treatment; so strange, indeed, that I am surprised he should have published the case, after having by dissection so decidedly convinced himself of the nature of the complaint, and his error in the treatment.

This gentleman describes the case to be " Inflammation of the Abdominal Viscera, principally in the Kidneys and Bladder, occasioned by excessive Debauchery;" and his patient's symptoms, when he first saw him, were clearly those of high inflammation of some of the abdominal viscera; " hot skin, and exquisite sensibility of the surface of the belly, particularly at the pit of the stomach; acute pains in the right kidney, inability to pass urine, bowels costive;" his indications were, " the warm bath, emollient enemas, and a bladder of *cold* water to the stomach."—Trusting to the efficience of these, he suffers his patient to remain " upwards of five days," the symptoms daily increasing in danger: " bilious vomiting, sleepless nights, yellow skin, eyes sunk, and hollow, loaded tongue, pains in the loins most acute, obstinate constipation, and total retention of urine; pulse frequent, small, and hard, with such extreme sensibility of the abdomen, that pressure made for the ordinary purpose of examination could not be borne;" then, and not till then, he acknowledges that the " violence of the symptoms left him in no hopes of a recovery." Yet something more must be done: he therefore says, " *emollient drinks* and *enemas* were now prescribed, with *cordial* and *antispasmodic* draughts.' This undoubtedly produced a change in the symptoms; for

we find the patient "*expectorating*, instead of vomiting, bilious matter;" and in a few hours he dies.

Mr. Jones may have his reasons for publishing this case; for my part, I would most carefully have concealed it within the pages of my day-book, knowing, although we are not in possession of any certain remedy for that *singular* disease "*Ecchymosis of the Heart;*" yet a mere novice would have tried plentiful bleeding, purging, blistering, &c. &c. for acute inflammation of the abdominal viscera, rather than have risked the chance of losing his patient, by trusting so confidently as he did to the effects of "emollient drinks and emollient enemas."*

June 18, 1814. G. AXBRIDGE.

For the Medical and Physical Journal.

A Dissertation on the Natural History and Medical Effects of Secale Cornutum, or Ergot; by OLIVER PRESCOT, A.M. Read at the annual meeting of the Massachusett's Medical Society, June 2, 1813.

AMONG the useful and important articles with which the *materia medica* of our country has lately been enriched, *one* has claimed an extraordinary degree of attention, from its being endued with singular and valuable properties, such as are denied to every other medicine with which we are acquainted—that of operating exclusively upon the *uterus.*

The recency of its introduction to medicinal use, will, I presume, render what little information I can give respect-

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* We cannot admit the correctness of the principle that would induce our ingenious correspondent to withhold an important fact in pathology on account of errors in practice; an extensive collection of such would be a most important acquisition to medical literature, would serve as a beacon to warn the practitioner of his danger, and in this respect would be as useful to him as a chart of rocks and shoals is to the mariner. In our estimation, to confess, or what is the same in effect to relate, an error, indicates an ingenuousness of disposition highly commendable, and certainly not deserving of censure. We may remark also, though we agree generally with the author of this paper on the point of practice, that one part of it is less objectionable than he seems to imagine—the application of cold to the parietes of the abdomen in cases of inflammation of its viscera, we know to have been attended with marked advantage. In a recent case of *puerperal peritonitis*, it acted like a charm, and produced a perfect remission of the pain, which the most copious detraction of blood had been scarcely able to mitigate for an hour. ED.

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ing it acceptable. Permit me, therefore, to attempt a brief detail of what has been discovered relative to its origin, its generic form and character; and at the same time consider, as far as the occasion will allow, the deleterious effects that have been ascribed to it, and the medicinal purposes it is calculated to subserve.

This production is generated by a peculiar disease, which occasionally affects the grains of rye, and is one of the four diseases of plants enumerated by Linnæus, and by him denominated *clavus;* some naturalists call it *clavus secalinus*, or *mater secalis*, others *secale cornutum*, and *secale luxurians*. The French term this production *bled cornu*, *seigle ergote*, or *ergot*. This disease very often attacks the rye in France. In the province of Salonia, more especially, it is very predominant; and in such seasons as are very moist, is occasionally seen in Great Britain and other parts of Europe. The rye in this country also, is so liable to the same disease, that, in our new settlements there is always, I believe, more or less of it to be found in this grain; but is more rarely to be discovered on fields that have been kept in a state of constant cultivation, for a considerable number of years; as those in the vicinity of Boston, and other towns on the seaboard.

The earliest account of this diseased rye is probably that of M. Dodart, in 1676; the latest I have seen is a memoir of l'Abbé Tessier, read before the Royal Medical Society at Paris, in 1776. To this last I am principally indebted for the following facts relative to its natural history, most of which accord with my own observations.

This diseased grain, which I shall call *ergot*, is found in the ear of the rye, in greater or less quantity, according to the season, and its situation. Its form is ordinarily crooked and long; it projects much from the *glume;* is larger in the middle than at the extremities, which are sometimes blunt, and sometimes pointed. It is seldom round in its whole length, there being generally three angles, and certain longitudinal lines, extending from one end to the other. In many grains, particularly the largest, there are small cavities, supposed by some to be occasioned by insects, by others by the sun. Its external colour is violet of different degrees of intensity, which encloses a dull white substance of a firm consistence, from which the external coat does not separate itself even after long boiling.

A grain of ergot breaks short, like a dry almond, and has nothing disagreeable either in its odour or taste; the grains are of different size, and vary in their length. Some are less than the grains of rye themselves, while others are eigh-

teen or nineteen lines in length, and two or three in thickness; but the length is more usually ten or twelve lines. Sometimes they are short, and at the same time large; but these are not of an ordinary form.

When the ergot is large, there are generally but few upon an ear, and the grains of rye, on the same ear, are fine and healthy, and the whole plant vigorous; on the contrary, when the grains of ergot are small, there are many on an ear, and the stalk is less strong and thrifty. There are commonly found four or five of these grains upon one ear, frequently ten or twelve, and sometimes even twenty. The grains of rye in those ears which have many ergots are never good, but are shrunk, and covered at their superior extremity, with a black powder.

This production, if exposed to the air, dries readily, and becomes less in size, and very light. A measure of it, that holds fourteen pounds of rye, will weigh but nine pounds.

It is occasionally found on *wheat*, but on the ears of this grain it is always short, though thick and well nourished; the quantity, however, produced by this plant is very inconsiderable.

On many ears of rye, there are to be found grains composed of rye and ergot, the portion ergotted makes sometimes one-half, and sometimes only one-third of the grain, and is that part within the husk, while that part which is rye is most distant from the ear. These grains, if planted, will not vegetate, the germ being destroyed. Winter and spring rye are, as far as has been observed, equally liable to this disease.

Much time and attention have been devoted by different naturalists, to ascertain the cause of this production in rye. Some, from the circumstance that there is more produced in rainy seasons, and in wet grounds, have attributed its formation to the moisture of the air and the earth; others believe it to proceed from the grains having been pierced by insects; while others have regarded it as a *mole*, occasioned by a faulty fecundation. This last opinion is more probably correct, for nothing has been found to contribute so much to its production, if the soil be moist, as a storm of rain falling upon the grain when in bloom.

There will always be more of it found on the borders of fields, than in other parts, where the soil is less beaten and more mellow. The humidity being equal, those fields are most infested with it, which have been newly turned up.

The soil and climate of Sologne are so peculiarly adapted to the growth of this substance, that it is said to produce more of it than all France beside; for, in some years, not less

less than one-fourth of all the grain raised in that province, is ergotted. In this district and its vicinity, there has, at different periods, prevailed among the peasants, a very malignant and mortal disease, which is characterized by a dry gangrene in some one of the extremities, sometimes in all of them, which has been generally ascribed to their living upon bread made of the ergotted rye.* This bread, M. Dodart informs us, does not differ, in regard to taste, from ordinary bread; is more particularly pernicious when new; but its effects are not observed until it has been eaten a considerable time. According to the observations of M. Noel, the ergot loses its deleterious qualities altogether, after having been kept a few months in sheaf: and writers all agree in this, that the disease it is supposed to induce is prevalent only at the conclusion of harvest, and ceases entirely before the commencement of winter.

Besides this spontaneous gangrene of the limbs, Hoffman and other writers have attributed also to its use another species of disease, which prevailed at different periods, in various parts of Europe, attended by convulsions and spasmodic affections. But these are now generally considered as originating from other causes.

In France, many experiments have been made on animals, to prove its malignant effects, and numerous communications have been published, shewing its noxious properties; but I believe it has never been considered, by any of these writers, as capable of subserving any medicinal or other useful purpose.

Some few empirics, however, it is said, have long known that the ergot would expedite lingering labour. But these ignorant pretenders bestow upon their nostrums such extravagant encomiums, and their impositions upon the credulity of the public are so numerous and frequent, that no credit whatever can be attached to their recommendations. Most of their mighty secrets, when disclosed, prove altogether inert; or at best very incompetent to effect the purposes for which they are intended. Their powder, to promote delivery, was consequently derided, and was thought by the faculty to be unworthy of serious attention or regard.

The first information the public received, from a source entitled to credence, that this production was, in reality, endued with such an unexampled property, was through the

* For a particular account of this disease, and the method adopted for its cure, vid. Duncan's Med. Com. vol. ix. p. 78.

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medium of the New-York Medical Repository,* by a letter from Dr. J. Stearns to Dr. Akerly. In this communication Dr. Stearns designates it by the appellation of *pulvis parturiens.*

Very soon after this publication, I procured a sufficient quantity for experiment, and have since frequently used it. With very few exceptions, its uniform effect is to stimulate the uterus to increased action, when administered in parturition. But I cannot say with Dr. Stearns, "I have never been disappointed in my expectations of its effects;" for I met this disappointment in the very first case in which I prescribed it. In that case, a neighbouring physician was attending the patient, the travail had progressed slowly, but in a regular manner, until the head of the fœtus was detruded so low in the pelvis, that the ear was perceptible to the touch, when the pains subsided, and had entirely ceased, some hours before I was summoned. One drachm was administered, in the form of decoction, at three separate doses, but without producing any effect, when the delivery was accomplished by the aid of the *forceps.*

Two similar cases have since occurred, in which the pains had totally ceased, toward the termination of labour, and in which parturient efforts could not be revived, by any quantity I thought prudent to administer. In one of these last, the patient took the decoction of more than two drachms in divided doses.

In four other patients, I had reason to doubt whether the pains were increased by its use, either in frequency or strength; but one dose only was given to either of them, for the irritable state of the stomach prevented its being repeated.

In every other instance, without exception, the effects of this prescription have been such as fully to demonstrate its powers "*ad partum accelerandum.*" The pains produced by it, when a full dose is given, are very peculiarly forcing, and the contractile effort of the uterus continues to that degree, that the fœtus is not suffered to retreat, but remains firmly retained where the last exacerbation of pain left it, until it recurs again. This incessant action will continue, if the delivery is not effected, for an hour or more, and when it subsides, the medicine, again given, will reproduce the same effects.

The frequency and violence of the uterine efforts, induced by the ergot, are not more extraordinary, than is its almost instantaneous operation. In twenty cases, I carefully noticed

* Vol. ii. p. 308.

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the precise time it required, to produce its customary effects. In two of them, the increased strength of the pains, and the continued action commenced in seven minutes from the time the decoction was taken; in one case it was eight minutes, in seven it was ten, in three eleven, and in three others it was fifteen minutes. In the four remaining cases, there was no apparent operation until twenty minutes had expired. In other cases, the time was not particularly noticed, but, as the twenty I have given were nearly in succession, it is probable they will shew the proportion as accurately as if the time in all had been precisely ascertained.

From this account of the manner in which the ergot usually operates, it will be readily conceived, by those who have not witnessed its effects, that it is a powerful agent, which requires prudent direction; but, when properly applied, will be highly useful, many times, to shorten a process, which, unaided, would prove extremely tedious and troublesome.

Before I had acquired sufficient experience of its effects, I imprudently used it once or twice when the pains were tardy and feeble, even in first labour, before the orifice of the uterus was much relaxed or dilated; it having been recommended to "produce all the beneficial effects of bleeding without inducing the debility." But it does *not* usually prove relaxing to the rigid fibre; its operation, therefore, subjected the patients to much unnecessary suffering. In one instance, no perceptible progress was made, by the continuance of forcible uterine efforts, during the space of an hour.

It is therefore important, even if the pains are feeble and unfrequent, to delay giving this stimulating drug, until considerable dilatation has taken place; to leave the business in its early stages to the slow and regular process of nature; and by the respite thus gained by the intervals from pain, preserve the strength and resolution of the patient for later and more painful efforts.

But if the labour should be long protracted, from the irregular action of the uterus, or the rigidity of the muscular fibres, these obstacles should be first removed by venesection; after which the ergot may be usefully employed, and its operation will be found mild and efficacious. But whenever recourse is had to venesection, the depletion should be copious, and the blood suddenly drawn from a large orifice, for no possible advantage will be gained by this operation, upon a plethoric subject, if the quantity taken be less than twenty ounces; and I have repeatedly taken thirty, before the necessary end could be accomplished.

I have never administered ergot in substance, but always

in the form of decoction, in the proportion of half a drachm to four ounces of water, of which one-third is taken at a time; if the pains are not sufficiently augmented in twenty minutes, then half the remainder is given; but a second dose is rarely required.

It will probably be found more beneficial in many cases to diminish the quantity to one large table spoonful, which, taken every ten minutes, will have the effect to increase the vigour of the pains, without producing such excessive and constant action, as is usual when the full dose is administered. I have lately directed it in this manner, and have been so much gratified with its more temperate, though efficient, action, that I shall hereafter prefer the smaller to the larger quantity.

It has been suggested, by a writer in the New-England Journal of Medicine and Surgery, that the death of the infant is a more frequent occurrence, in cases in which the ergot has been employed, than where its agency has not been used. If this is indeed the case, it forms at once an insuperable objection to its use, except in cases where its safety is well defined; and the subject certainly demands deliberate attention and serious inquiry. For myself, it is, I conceive, rather questionable, whether more injury would result to the child "from unceasing pressure for several minutes, and occasionally for half an hour or more," than for a much more tedious process, in which the pressure is reiterated, and the head permitted to retreat after each successive effort. But, in a matter of such importance, we ought not to be governed by conjecture; but should adopt or reject it, as its beneficial or destructive operation is tested by experiment. My own experience has been such, as to persuade me, that the above suggestion is unfounded. It is true, that in twenty-two cases of first labour, in which this medicine had any effect, I lost four children; and in thirty-five where it was given to women, who had been previously delivered, I have lost one. But all these deaths were attended with such circumstances, as fully to exculpate the ergot from any agency in the event. And, when it is recollected that this medicine is not used, except in cases that are long protracted, or are likely to prove tedious and troublesome, it will not be thought, I conclude, that this unfortunate event happened more frequently, or in greater proportion to the whole number of cases, than might reasonably have been expected, had this medicine not been prescribed. But exclusive of any injurious effects, which may result to the infant, the ergot requires much more caution with respect to its use, in cases of first labour, than in others; for, owing

to the usual tension and rigidity of the parts, the protruding progress will not be accelerated, in any reasonable proportion to the additional pain and suffering it produces. It is also too active and powerful an agent, to be safely directed by an ignorant or unexperienced accoucheur; and, before dismissing the subject, I most cordially join in cautioning those who have not been in the practice of using it, and witnessing its operations, to be wary how they employ it until the muscular fibre is properly relaxed, and the *os uteri* considerably dilated. This caution is also more especially necessary, if they are not positively certain that the presentation is natural, as well as "that there are no preternatural obstructions, to prevent delivery; as the violent pain, and almost incessant action, which it frequently induces, in the uterus, precludes the possibility of turning" the fœtus.

Dr. Beekman is said to have succeeded in a case of amenorrhœa, by giving one drachm of the ergot in decoction. In consequence of this recommendation, I tried its effects in one case of partial obstruction, by giving it, first in a dose of one drachm; at the next period the same patient took two drachms, but without the desired effect. And from analogy, I should conclude, that it was unadapted to this complaint. The tendency of its operation is, I conceive, to constringe the uterine fibres, and lessen the caliber of its blood-vessels; for, when given to parturient patients, there has been no instance, within my knowledge, of undue hemorrhage after delivery, although several, who have taken it, had been previously accustomed to profuse discharges. The lochia also, have occasionally been so much diminished, after its use, as to excite apprehension for the event. In two cases this discharge entirely ceased on the second or third day after delivery, and did not re-appear during the month; but no puerperal complaint was induced, nor was their recovery delayed by this incident.

The uniform operation of the ergot to restrain uterine hemorrhage, has been noticed by other physicians. It has in consequence frequently been prescribed, a little previous to the birth of the child, or immediately after, to patients that have been accustomed to flow immoderately at such times, and it has always proved an effectual preventive.

This singular property of the ergot, to diminish the enlarged cavity of the uterus, is never more strikingly exemplified, than when its agency is employed to restrain those floodings which sometimes appear in the early months of pregnancy, when the action of gestation has ceased, and abortion must follow. In such cases it speedily excites in

the uterus such energetic action, that its contents are soon expelled, and the hemorrhage ceases.

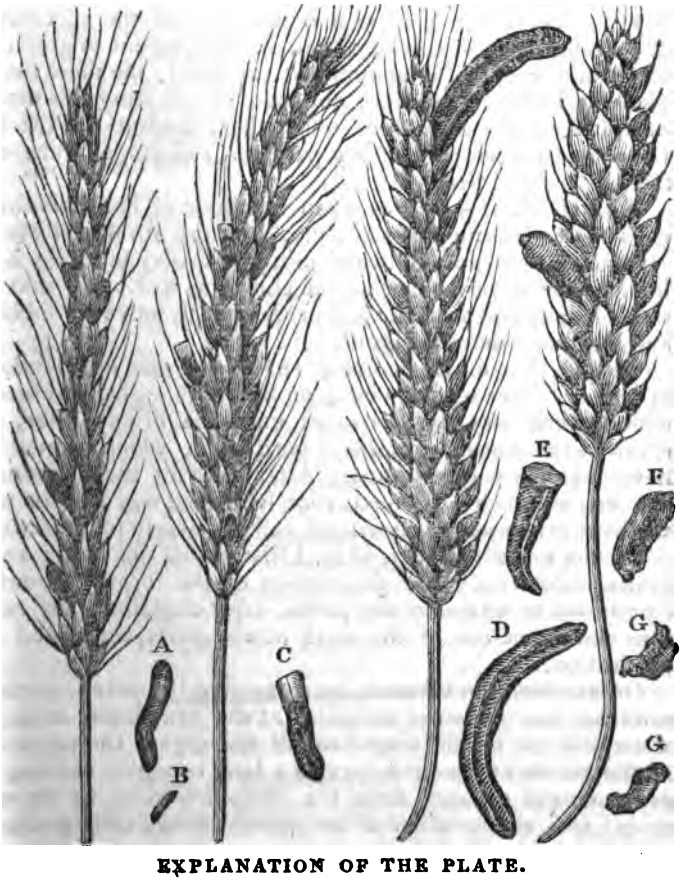
In order to determine what operation it might have on a healthy male subject, the decoction of one drachm has been taken at a dose, but it produced neither nausea nor other perceptible effect. After a few days, the same person took a like quantity, which proved equally inert; neither did the larger quantity of two drachms, at a few doses, but all within the space of two hours, occasion nausea, vomiting, or pain in the female, to whom it was prescribed, for deficient catamenia.

Its operative powers, therefore, appear wholly confined to the uterine fibres, when lengthened from an enlargement of that viscus. In such case it speedily excites in them strong contractile action, and so long as the stimulating effect of the medicine lasts, this action is unceasing. The uterus is thus made to compress closely, upon any substance whatever within its cavity, and this resistance to its further collapsing, will cause violent pain in that organ; but if it find no such resistance, the contractile action progresses without any uneasy sensations. The healthy unimpregnated uterus having nothing within its cavity, will therefore not be affected by the ergot; neither is it calculated to restrain menorrhagia, proceeding from increased arterial action; as the size of the uterus, in such cases, is nearly at its minimum.

Until we clearly understand the reason why some medicines possess a greater affinity to one part of the system, or to one organ, than to another, it will be difficult to explain the *modus operandi* of the ergot. It is, as has been already observed, but a short time since it first attracted the notice of physicians, as being subservient to any useful purpose in medicine; and I have not yet discovered that it possesses any other properties than such as I have mentioned. Like all other active and valuable medicines, when first made known to the public, it requires a long series of judicious and attentive experiments, fully to develope its character, its qualities, and the precise manner in which it may affect different parts of the human system. Like them, while its use is beneficial, its abuse is destructive. A cautious direction of its powers cannot, therefore, be too strongly recommended. If properly administered, it must be esteemed an important and valuable acquisition to our *materia medica*, and is unquestionably destined to hold a high rank among the means which Nature has provided for relieving the sufferings of her children.

Plate copied from the one annexed to l'Abbé Tessier's Memoir in Histoire de la Société Royale de Médecine. Tom. 1. pars 2d. p. 418.

Fig. 1. *Fig.* 2. *Fig.* 3. *Fig.* 4.



EXPLANATION OF THE PLATE.

Fig. 1. An ear of rye, which contains a great number of small ergots.
A. A middle-sized ergot detached.
B. A small ergot detached.

Fig. 2. An ear which contains grains composed of rye and ergot.
C. A grain composed of rye and ergot.

Fig. 3. An ear of stout rye, which contains only one large ergot.
D. A great ergot detached.
E. A great ergot broken transversely.

Fig. 4. An ear of wheat which bears one ergot.
F. An ergot of wheat out of the ear.
G G. Ergots irregularly shaped.

For the Medical and Physical Journal.

A Case of Premature Parturition, by puncturing the Membranes in a deformed Pelvis; by JOHN MARSHALL, Esq. Surgeon.

BEFORE entering upon a description of the successful termination of this case, I think it expedient to give the heads of two dreadful labours that preceded, the more satisfactorily to prove the relief obtained by adopting this mode of practice, and shew how much the tediousness of the labour, and the severity of my patient's sufferings, were effectually diminished.

Mrs. H. H. D—— was taken in labour of her first child on Tuesday morning, seven o'clock, on the 5th day of May, 1809, and was not delivered until the Friday morning following, about two o'clock; the child was still-born, and at the commencement of the labour was felt to move distinctly, and with considerable vigour.

On the 13th of September, 1810, she was again taken in labour of her second child, on Saturday night, at eleven o'clock, and was not delivered until the Friday after, at seven in the morning, of a still-born child, which seemed to have but very recently died. After each of these labours, she was so much weakened, that her voice was lost for ten weeks, and she was incapable of walking nearly four months.

On the 8th of October, 1811, I first visited this lady; and, hearing attentively her description of the former labours, I proposed to examine the pelvis, after explaining my reasons and suspicions of the state of the parts concerned in parturition.

On examination I found, by measuring the pelvis, a considerable contraction of the pubis at the symphisis, so as to allow only the middle finger to fill the curve, the capacity of the pelvis at the brim formed a long triangle, causing a preternatural distance from the symphisis pubis to the sacrum: this malversation of the pelvis immediately satisfied me of the great difficulty a full-grown fœtus must have to pass, and the total impracticability of my patient's ever completing the full period of gestation without a result similar to what she before experienced. I calculated, as near as possible, the period she had then completed, and proposed to puncture the membranes of the womb on or about the 19th of November following, which would bring the time to seven months and rather more than a fortnight, with a view to be nearer the eighth than the seventh month, to give the child a better chance of being reared, and to favour the probability of a head presentation.

On the 19th of November, about twelve at noon, I punctured

tured the membranes of the womb, by means of a probe half as long again as the usual size, and stouter in proportion, conducting the point with my left hand, along the middle finger of the right hand; the liquor amnii began immediately to run off, and was caught in considerable quantity in an earthen vessel before I left the room, and, upon the patient's moving, continued to come away in larger or smaller quantities until the beginning of her pains, which commenced the next day, twenty-six hours after the operation of puncturing, i. e. at two o'clock in the afternoon. The pains were very feeble, and occurred about every half hour; a quarter before eight in the evening, the real strong pains of labour began, and continued equally strong and frequent until the birth of the child, which took place at a quarter past eleven that night, making the short space of *three hours and a half.* The head presented, and as soon as it escaped the contracted part of the pubis, it required only two or three pains to be delivered. My patient was fully able to suckle her child, and four days after delivery, to use her own words, "she felt as well as if nothing had happened."

I observed during the progressive state of labour, that a considerable quantity of a mucilaginous fluid was given off from the glands situate in the neck of the womb, which appeared to make up for the deficiency of the liquor amnii, and to facilitate the passage of the fœtus. This circumstance I have noticed in every case wherein I have performed the operation. The child is now living, and remarkably strong and healthy.

Half Moon Street, July 2, 1814.

For the Medical and Physical Journal.

Case of Hydrothorax; by Mr. WARDLEY.

JOHN WHITE had a dry cough, with extreme difficulty of breathing, which prevented his lying down in bed. He was troubled with distressing palpitations of the heart, and complained of a coldness and weight in the stomach. The lips were pale; he was drowsy, though never refreshed by sleep; his appetite was lost; he was generally thirsty; and the pulse was strong, without perceptible intermission. The only remedy employed was quicksilver pill with squills, a blister to the chest, and nitre in his common drink. In ten days he was evidently better; and in six weeks entirely recovered.

W. WARDLEY.

Warren-Street.

For

For the Medical and Physical Journal.

Cases *in the* Practice *of an* Hospital Physician.

(Continued from p. 32.)

Case of Eruptive Affection.

M. C. aged 45, admitted the 14th of January. About three weeks ago a pustular eruption of a particular kind appeared in every part of her body, though not in any considerable quantity. Previous to its appearance, she had been complaining more or less for five or six weeks of various febrile symptoms, such as head-ach, thirst, heat, vomiting, or looseness, and during all these times, every morning, she fell into a profuse sweat, which continued several hours, though without being preceded by any sense of coldness or trembling. All these complaints, she says, were greatly relieved when the eruption appeared, which is now on the decline in most parts of her body, but still continues on her face. Before she was affected with any of these complaints, she had got a fall, by which her shoulder and leg of one side were much hurt, and still continue very painful and numbed; has at different times laboured under the fluor albus. Her menses have not appeared for several years; belly regular; P. 84.

15th.—P. 88. Capt. hor. som. Solut. Merc. Corros. ℥fs. & Bibt. Decoct. Burdan ℞ij. in die.

19th.—Pustules continue on her face, but go off on the rest of her body; belly loose. Omit. Solut. Sumat. Tinct. Opii, gtt. xxx. o. n.

24th.—Still continues to purge, otherwise complains only of her limbs. Contin. Haust. Anodyn. & inung. humerus & brach. Lin. Ammon. Let her have a flannel sleeve to cover her arm and shoulder.

26th.—Pustules not quite gone off her face; has had two stools to-day, and in other respects as yesterday. Contin. Anod.

29th.—Complains of pains of her arm and leg as before; otherwise well, and without purging; has some œdematous swelling of both her legs. Rep. Haust. Anod. Solut. Tart. Emet. ʒj.

Feb. 1st.—Was sick after the draught last night, but did not vomit; did not sleep so well as formerly, seemingly from the pain of her limbs; sweated some, and has since had a stool. Rep. Haust. Tinct. Opii, gtt. l.

3d.—P. 80, full; complained more of her pains last night, and does so still; had little sleep, and did not sweat last night. Rep. Haust.

6th.

6th.—Pains somewhat easier, though her left shoulder is now in some degree affected, and the eruption continues on most parts of her body as fresh as at first. Rep. Haust.

7th.—Pains continue in the right side as before; belly regular; was hardly at all affected with her draught last night; neither sleeps nor sweats much. Rep. Haust. Tinct. Opii, gtt. lx.

9th.—The pains of her limbs were severe last night, and she has had no sleep or sweat. Rep. Haust.

10th.—The pain of her ancle being severe, a blister was applied to it last night, which has risen well, and relieved the pained part; rested better in the night; all her pains easier. Rep. Haust.

11th.—Does not feel the pain of her leg, and has little in her shoulders; slept and sweated some last night. Contin. Haust.

13th.—Has still so much pain of her ancle that she cannot stand upon it. Interior. Malleol. Appr. Emp. Episp. Contin. Haust.

17th.—Pains easier, but much troubled with a cough. Vesp. Capt. Pulv. Ipecac. ℈j. & Hor. Som. Capt. Haust. Anod. ex Tinct. Opii, gtt. xl.

20th.—Cough easier; slept better last night. Contin. Haust.

21st.—Upon getting up she feels the pain of her limbs; slept little in the night, but sweated freely; cough continues; belly regular. Contin. Haust.

23d.—P. last night 106, just now 84; sweated a good deal last night; cough almost gone; pains easier. Contin. Haust.

24th.—Complains of her pains, but more of her stomach, and has had a frequent vomiting of her food for some days past; belly regular. Capt. Pulv. Ocul. Cancror. ℈i. bis in die. Contr. Haust.

25th.—P. frequent, and a little hard; last night was seized with coldness and shivering, and this morning an erysipelas appears upon her face, with much swelling, and already some blisters; belly regular. Mitt. Sang. ad ℥viij. Let her face be well dusted with flour. P. M. Inj. Enem. Salin. ex Aq. tepid. ℔ifs. Capt. Mist. Nitros. ℥j. 2da q. q. hora.

26th.—P. 104. Erysipelas continues; blood sizy; complains much of sickness; pulse still very full; had a stool by the clyster. Mitt. Sang. ad ℥viij. Contin. Mist. Nitros. Rep. Enem.

27th.—P. 110, still full; swelling rather fuller than yesterday, though not spreading, and in several places oozes out a moisture; breathes and swallows quite easily; has had a looseness for two days, and therefore did not get the clyster yesterday;

yesterday; blood very sizy. Rep. Venæsect. ut heri. Contin. Mist.

28th.—P. 116; slept none last night, and was a little delirious; has had several stools. Vesp. Capt. Solut. Tart. Emet. ℥ ſs. ad 4tam vicem. Con. Mist. Nitros.

29th.—P. 112, not so full or hard as before; erysipelas abating on one side of her face, but continues on the other; slept a little in the night, and was less delirious; vomited after the solution; belly still loose; and takes no food. Rep. Solut. Contin. Mist. Nitros.

March 1st.—P. 100; swelling of her face abating; slept well last night, and feels herself easier, and has taken a little food to-day. The solution did not make her vomit, but has given her several stools. Omit. Sol. et Cont. Mist.

2d.—P. 110, soft and regular; the swelling in general still continues to abate, except on one cheek, where it is rather increased; sleeps almost constantly, and none of her complaints are worse, though she still appears to be confused at times; she has taken more food to-day than for several days past, and with some appetite; diarrhœa, in a moderate degree, still continues. Contin. Mist.

3d.—P. 76; continues to recover; the inflammation on her cheek diminishing; diarrhœa abating. Contin. Mist.

4th.—P. 78; the inflammation of her face quite gone; sleeps a great deal, but is sensible when awake; takes food; belly regular. Contin. Mist.

20th.—Without complaint. Dismissed cured.

Case of Hysteria.

A. M. aged 20, admitted the 10th of October, complains of head-ach, difficulty of breathing, frequent dry cough, pain of her left side which is greatly increased by the cough or making a full inspiration, nausea, loss of appetite, great thirst, and a pain in the small of her back; tongue clean and moist; skin warm; belly natural. Her menses are regular, but they stopped at their last return sooner than usual: this, however, was fourteen days ago, and her complaints came on only last Friday. She can assign no cause for them; has been blooded, and used some medicines with a little relief. Sum. Solut. Antim. Tart. ℥ ſs. om. ½ hor. ad 6tam vicem vesp.

11th.—P. 88. Solution did not make her vomit, but procured three stools. She has frequent startings, occasioned, as she says, by the pain of her side, which is sore to the touch, and she cannot lie on it. When she was first taken ill she was seized with a sort of a fit, as it appeared, quite insensible; says she is unable to speak during this attack, but

but hears what is said by the by-standers. After fetching two or three deep sighs, she recovers; says she has had one of these fits every night since Friday; sleeps very ill. Sum. P. Ipec. gr. xv. & sum. Tinct. Opii, gt. xxv. h. s.

12th.—P. 102; vomit operated well; tongue moist and clean; a remarkable exacerbation of her complaints comes on about five or six o'clock in the evening; was restless in the night.

℞. Pulv. Cort. ℈j.

Syr. Simp. q. s. fiat Bol. hor. 4ta vespertin. sumend. Let her legs be fomented for half an hour together between four and five o'clock in the afternoon.

13th.—P. 76; had no fainting fit last night, and finds herself easier to-day. Rep. Bol. & Fot. ut antea.

14th.—P. 72; had a slight fainting fit last night, but slept well, and has no particular complaint to-day. Cont.

15th.—P. 72; had no fainting fit last night, but complains much of a pain in her left side to-day.

℞. Magn. Alb. ʒj.

Pulv. Zinzib. gr. x. M. Sumat hor. som.

App. Emplast. Galbani part. dolent. later.

16th.—P. 80; had no fainting fit last night; great pain of her stomach, flatulency, and oppression of breathing; appetite a little better. Int. Bol.

17th.—P. 88 by the fire; has had no fainting fit; finds relief from the medicine, which makes her pass a great deal of wind; all her complaints easier. Cont. Med.

18th.—P. 86; complains of head-ach; catamenia have come on since yesterday.

19th.—P. 86; catamenia stopt last night; complains much of the pain at her stomach. Sumat Mist. ex Tinct. Cast.

20th.—P. 80. Had two fits yesterday evening, though she took the castor mixture twice. She was ordered, if threatened with another, to take ʒj. of the mixture with Tinct. Opii, gtt. xv. which, however, did not prevent the accession of a fit about eleven o'clock last night. Complains much of a pain of her head and stomach. App. Emp. Lyttæ Nuch.

21st.—P. 92; had several fainting fits yesterday afternoon; head-ach better; breathes more freely. Cont.

22d.—P. 78; had several fainting fits last night, though she took the castor mixture as usual; complains of great head-ach and pain of her stomach.

℞. Aq. Menth. Pip. ʒj.

Magn. Alb. ʒiſs.

Pulv. Zinzib. gr. x. M. Sum. Statim.

23d.—P. 64; complained of violent head-ach and great

oppression of breathing last night, which were relieved by pediluvium, and she fell asleep; complains still of great head-ach, thirst, sickness, loss of appetite, and pain of her stomach. Sum. Pulv. Ipecac. gr. x. Vesp. Tinct. Opii, gtt. xxv. h. s.

24th.—P. 60, vomit operated well, but she threw up only some viscid phlegm; slept well, and complains only of a pain in her stomach. Utatur Vesp. semicup. Calor. 90 Far.

25th.—P. 70; had a pretty good night, and is better to-day.

27th.—P. 90 by the fire; head-ach better; no complaint, but a slight pain in her side. Let the side be rubbed with camphor liniment, and covered with flannel.

30th.—Dismissed cured. Let her have some of the Linim. Ammon. and the other medicines along with her.

Case of Jaundice.

S. J. aged 30, admitted the 2d of March, about three weeks ago was seized with febrile symptoms, which till this time seemed to have recurred irregularly, leaving her altogether for some days. About four days ago, after a more remarkable attack, (which was attended with more severe head-ach, greater sickness, pain and swelling of her stomach, inclination to vomit, drowsiness, and sluggishness) she observed a yellowness of her skin, which has since been increasing, though it is not considerable. The albuginea of her eyes is considerably turgid; for three years past she has been subject to a pain of her right side, which was supposed to have been occasioned originally by carrying a heavy load; this she says is now very severe. By her account she has likewise of late had frequent attacks of erysipelas on her body. Her present illness is imputed to vexation; is commonly costive, but had a stool yesterday, which, she says, was white. Her urine tinges linen yellow. Is a married woman, but never bore children. Her menses have been frequently obstructed, and they have not appeared for seven weeks past. P. 78.

3d. P. 60. Vesp: Capt: Pulv: Ipecac: gr. xv.

4th. P. 72; vomit operated well last night; symptoms continue as before; costive. Inj: Enem: Salin:

℞. Pulv: Summit: Absynth: ℥ ſs.
Rhæi: Elect: ʒj.
Sapon: Hisp: ℈j.
Syr: Com: q. s. fiat Elect: cujus
Capt: Magnitud: Nuc: Mosch: bis in die.

8th. Symptoms as before. Contin: Elect: & vesp: rep: Ipecac: ut antea.

9th. The vomit did not operate freely, and she has had

no stool since; complains of head-ach alternating with pains of her stomach; jaundice symptoms as before. Contin: Elect: Cras mane Capt: Chryst: Tart: ʒi. Pulv: Jallap, gr. xv.

11th. Continues to complain of head-ach, with some chilliness, but her pulse is natural; less jaundice. Vesp: Capt: Pulv: Ipecac. ut antea cras mane. Contin: Elect:

12th. P. natural; vomit operated well last night; jaundice continues to go off; still complains of her head and stomach; has had no stool since the night before last. Contin: Elect: hod: & Capt: Cryst: Tart: ʒj. Omn: ½ hor: ad 3am vicem.

15th. Jaundice quite gone; the Cr: Tart: has not operated yet; complaints of her head and stomach continue. Cr: man: rep: Cryst: Tart. ad Dos: vi.

16th. P. 92; had a severe head-ach and a febrile accession yesterday afternoon, but did not sweat; head-ach and pain of her side still frequently troublesome; the Cr: Tart: has not yet operated.

19th. Has still head-ach; and frequent fits of chilliness, especially in the afternoon; has had no stool these two days.

℞. Fol: Sen: ʒj.
Semin: Corriand: ʒj.
Affund: Aq: Bullient: ℥ viij.
Digere per hor: iv. & Colatur: add: Sal: Glaub: ʒvi.
Syr: Limon: ℥ j.
Capt: cras: man.

22d. Without complaint. Dismissed cured.

(To be continued.)

For the Medical and Physical Journal.

Remarks upon the Report to Parliament of the National Vaccine Establishment, with Reasons in favour of Vaccinating with one Puncture; by Mr. EDWARD RIGBY.

IN the Report to Parliament of the National Vaccine Establishment, dated May 25, 1814, I am sorry to observe a paragraph which cannot fail to excite doubt and alarm in great numbers who have been vaccinated. It states that "most of the failures appear to have arisen from the practice of vaccinating with a single puncture, and afterwards opening the vesicle, and taking a portion of the lymph, for the purpose of propagating the infection."

No physiological reason is assigned for this, and I believe it would be difficult to prove that a single perfect vesicle, which goes through the usual stages and exhibits the characteric appearances of this singular disease, can be less the effect of a constitutional affection, than any given greater

number would be; nor can it, I should think, be easily admitted that puncturing the vesicle, and abstracting a portion of the lymph, can have any tendency to destroy the constitutional principle which produced it. The ample experience I have had in vaccination has not in the smallest degree led me to suspect the possibility of such a circumstance. In Norwich and its neighbourhood it has been, hitherto, the general practice to vaccinate with one puncture only, and to take ichor in many instances: many thousands, I know, have been thus vaccinated; and, though in no place have the vaccinated been more exposed to variolous infection, in no place has vaccination been more completely successful. In my late Report of the Norwich Pauper Vaccination, from August 12, 1812, to August 12, 1813, I consider this fact to be fully established: I have there said, "though, during the vaccination from February to August, the small-pox still made a fatal progress, the melancholy fact afforded an irrefragible proof of the protracting power of vaccination: during this period probably not fewer than four hundred individuals had the small-pox; there was likewise no intermission of the disease, it was constantly spreading, and on many occasions, as before observed, patients were publicly exposed. Of the two thousand three hundred and ninety-one vaccinated during the year, it may be assumed, that at least two thousand have been resident in the city since February, and consequently equally exposed to an infectious atmosphere as the unvaccinated, and yet but one single instance, in that number, has occurred, in which the protecting influence of vaccination has been suspected, and this has been clearly ascertained to have been a case of premature vesicle, which suddenly rose, soon disappeared, and evidently produced no constitutional affection."*

It is ten months since this Report was written, and during this time the city has not been once free from the small-pox, and it still prevails in many of the neighbouring villages, and yet we hear of no failures in vaccination. I would also observe, that since vaccination was first introduced into Norwich, including a period of fifteen years, the small-pox has repeatedly appeared. It was very prevalent and very fatal in 1805 and 1806, and was again introduced in August 1807, and continued its ravages till the end of 1809; at this time the deaths from small-pox being recorded, it was ascertained that two hundred and three died, whence it is probable that more than twelve hundred individuals had the disease. In 1812 it was again admitted, by an infected

* See Med. Journ. vol. xxxi. p. 138.

child

child coming from the country, and subsequently by variolous inoculation; but the prompt and extensive vaccination which at that time took place arrested its progress, and the city was again free from it till February 1813, as before noticed.*

It is obvious that a great majority, not only of the paupers who have been more recently vaccinated, but of those of all classes who have been vaccinated in Norwich within the last fifteen years, must necessarily have been exposed to the contagion of small-pox, at one or other of these periods, and yet, I repeat it, we have heard of no failures in vaccination.

From this ample testimony it cannot surely be doubted that a single perfect vesicle affords as complete security against variola as any indefinite number; and, if so, there would seem to be an obvious objection to unnecessarily multiplying the vesicles, which in all cases go through a high degree of inflammation, are often attended with painful tumefaction and even suppuration in the axilla, and, if exposed in the latter stage to any act of violence, are apt to assume a very disagreeable ulceration; more especially as young children, now the principal subjects of vaccination, are most liable to suffer in this way.

In making two punctures, it must be acknowledged there is a double chance of the lymph being absorbed; and there certainly are situations in which it may be right to profit of this, as in country practice, where the patient is at a considerable distance from the surgeon, and failure in the first instance is obviously attended with much inconvenience, and the facility of obtaining fresh ichor being there so much less than in towns, where vaccination is more constantly going on.

Having thought it right to vaccinate all my patients with one puncture, and having taken ichor from many of them, I feel it incumbent on me, in this public manner, most unequivocally to declare my perfect conviction of its security.

Norwich, July 4, 1814. EDWARD RIGBY.

For the Medical and Physical Journal.

Observations on an indigenous Remedy for Cancer, with a Copy of the Prescription; by LEONARD GILLESPIE, M.D.

THAT savage nations are possessed of secrets, as to the nature of plants and their virtues, powerful in destroying and in preserving life, the testimony of many enlightened

* See Facts relating to the Poor in Norwich, p. 92 and 93.

travellers sufficiently demonstrate: hence the study and investigation of indigenous medicine and surgery, amongst the savage natives of tropical climates, abounding as these countries do with vegetable simples of the most efficacious nature in many diseases, has always appeared to me very interesting, and in my practice for many years in the West-India Islands, has proved of the utmost benefit to me.

These remarks are premised to the contents of the annexed paper, containing an indigenous African cure for cancer, communicated to me by Mr. Henry Haffey, late a Member of Council, and Colonel of Militia in the Island of St. Vincent, of which he was one of the oldest planters. Mrs. Haffey, who is well acquainted with the Carribean plants, joins her husband in asserting that she was an eye-witness of the two cures performed, mentioned in this paper: whether or not these sores were true cancers, it would be difficult to ascertain, but the treatment of them as such by the medical men consulted, together with the destruction of the nose of the patient in both instances, are sufficient proofs of the malignant nature of those ulcerations.

The plants here mentioned are very common in the West-India Islands: the physic-nut is a shrub abounding with a tenacious juice; the leaves are used in infusion internally as a purgative and febrifuge, and are used externally in decoction as a wash for ulcers. The experienced Dr. Granger, in his Essay on West-India Diseases, in treating of ulcers of the legs (p. 86), says, "After washing the ulcers with vitriol water, French physic-nut leaves should be pounded and applied fresh to the sore. I have known that application succeed, when the most pompous prescriptions of the shops have failed."

The other plant, the thistle of the Islands, is totally different from the thistle of Europe: it is a succulent plant very common in the Islands.

As a remedy for cancer, Goclioke*, in a dissertation, recommended the juice of the tomentous thistle of Europe; and it is an article in the materia medica of the Russian Pharmacopœia.

Mr. Haffey has, at my solicitation, sent to St. Vincents for some of this preparation, and when it arrives, he will take care to send some of it for trial to a surgeon versed in the treatment of cancers.

Bath, LEONARD GILLESPIE,
June 21, 1814. *Physician in the Royal Navy.*

P.S. I have given the Linnæan and French names of the plants.

* De Onopordo, Carcinomatis Avorrunco, 1739.

A Cure

A Cure for Cancers.

Half a pint of the milk of physic-nut,*
Half a pint of the milk of thistle,†
1 oz. of Castile soap, cut fine,
A wine glass of rum.

The above to be well mixed and dried in the sun until it turns to the consistence of salve, to be spread on lint and applied to the part affected, first bathing it with a decoction of the leaves of the physic-nut; those of the English plantain are usually substituted.

In the year 1794, a cancer appeared in the nose of a young female, servant of mine, who was treated by medical men for twelve months and more, but the complaint increased, and her nose was lost. She found out an old African woman, who undertook to cure her, which she effected by the above recipe. She is now living, and in good health.

In the year 1796, a cancer appeared on the nose of a young male servant belonging to me. He also lost his nose, but in other respects is in good health, the progress of the cancer being stopped by the above recipe.

The patient should live low, not eat much animal food and no fish. H. H.

For the Medical and Physical Journal.

Observations on the Surgery of the Ancients, vindicating their Claims to many of the reputed Discoveries and Improvements of modern Times. By DAVID HOSACK, M.D. Professor of the Theory and Practice of Physic and Clinical Medicine in the University of the State of New-York, Member of the American Philosophical Society, of the New-York Historical Society, &c.

IN the early ages of society, external accidents constituted the greatest evils to which man was exposed. Intemperance, luxury, and the refinements of civilized life, had not then impaired his bodily constitution, nor debauched his mind. He passed his days in the exercise which was necessary to procure the means of his subsistence, and devoted his nights to rest, undisturbed by care, or those anxieties which at present occupy the civilized portion of the human race.

Man, in a state of nature, was therefore subject to, comparatively, but few diseases; though he was probably not

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* Tutropa multifida, Linn. Medicinier of the French.

† Argemone Mexicana, Linn. Yellow thistle, the seed of which is in common use in the West-India Islands as an excellent yet mild emetic and purgative in dysentery, remittent and intermittent fevers.

less

less exposed to the common casualties of life than at the present day. In climbing the tree to procure its fruits, in traversing the forest, he was necessarily exposed to ordinary accidents; his attention, therefore, would be first directed to the discovery of such remedies as were calculated to remove the evils thus induced. To restore to its socket the dislocated bone, or to replace it when broken; to heal the wounds inflicted by the beast of the field, or the venomous serpent, must necessarily have been among the first objects of his attention. Accordingly, it is observed, by Celsus and other ancient writers, that surgery was cultivated before any other branch of medicine.

The first writers upon physic trace the origin of their art, in common with all other branches of knowledge, to the Egyptians. But the history of surgery, as practised by that people, is so involved in fable, so blended with the pagan mythology, that, notwithstanding the labours of Prosper Alpinus, it is impossible to ascertain their knowledge of medicine, or of any other branch of science. The operations of surgery, stated by the professor of Padua, as having been performed by the Egyptians, namely, the extraction of the stone from the bladder; bleeding in the veins and arteries; the application of the actual cautery, and the paracentesis of the abdomen, in dropsy, must probably have been the operations of the modern and not of the ancient Egyptians.

Let us, therefore, pass over the stories of Hermes and the Egyptian Æsculapius; the fabulous accounts of Osiris, Serapis, Isis, Horus, and Thonis, who were reputed the first practitioners in medicine, and ranked among their divinities, to the more authentic history of the surgery of the Greeks, as related by Homer and Hippocrates.

The first Greek surgeons, on record, are Æsculapius and his sons Machaon and Podalirius. Æsculapius flourished about fifty years before the Trojan war; in which his two sons distinguished themselves, not only by their valour, but by their skill in curing wounds.

In the Iliad, Machaon is spoken of as one of the most distinguished surgeons at the siege of Troy. He is called the *preserver of the Greeks;* and when wounded by Paris, he is lamented, as deprived of the benefit of that skill which he had so often exercised for the benefit of others.

> "The great Machaon, wounded in his tent,
> "Now wants that succour which so oft he lent."*

* ——————— Μαχάων,
Τον μεν εν κλισιησιν ιουμαι ελκος εχοντα,
Χρειζοντα και αυτον αμυμονος ιητηρος,
Κειρθαι.

On

On another occasion, Homer shows the high estimation in which the profession was held:—

"A wise physician, skilled our wounds to heal,
"Is more than armies to the public weal."†

Of Podalirius too, it is said, that on his return from the destruction of Troy, he was driven upon the coast of Caria, and that he cured the daughter of Damæthus of a severe and dangerous illness, by bleeding her in both arms. This is the first authentic record of the operation of blood-letting. It is also stated, as an evidence of the value attached to the profession, at that early day, that the prince, as a reward to Podalirius, for his skill and services, gave him his daughter in marriage, with half of his kingdom as her portion.

Notwithstanding these testimonies of the skill of Machaon and Podalirius, it appears that their practice was very much confined to the removal of the darts or arrows with which their wounds were inflicted, and afterwards to the application of fomentations and styptics to the wounded parts; for, when the heroes recorded by Homer were in other respects severely injured, as in the case of Æneas, whose thigh bone was broken by a stone thrown by Diomedes, he makes no mention of any other than supernatural means employed for their relief.

In the writings of Hippocrates, we have a full and circumstantial detail of the state of medicine and surgery among the Greeks in his time. He lived about 400 years before the birth of Christ; and was the first who treated of medicine in a regular or systematic manner. Prior to his time, even among the Greeks, the practice of medicine was confined to their priests and philosophers. According to Celsus, the healing art became united with the duties of religion, from the consideration, that diseases were inflicted upon mankind as punishments for their crimes; and were only to be averted or removed by the intercession of their priests, and the remedies they prescribed. The connection which exists between the study of medicine and the works of nature, also led their philosophers to unite the healing art with their favourite pursuits; and it is related of Pythagoras, that he travelled from place to place, not so much to teach the peculiar doctrines of his philosophy, as to practise physic. Thales, Empedocles, Heraclitus, and Democritus, were among the most distinguished of the Grecian philosophers. They were also celebrated as eminent practitioners of medicine and surgery.

† Ἰητρὸς γὰρ ἀνὴρ πολλῶν ἀντάξιος ἄλλων,
Ἰὸν τ' ἐκταμέειν, ἐπὶ τ' ἤπια φάρμακα πάσσειν.

Such was the unsettled state of medicine until the time of Hippocrates. In his hands it assumed the form of a distinct science, and was practised as a separate profession. By his labours it became enriched with his valuable and numerous observations on the symptoms, causes, and cure of diseases; and since his time has been respected and cultivated, as among the most important of human pursuits.

Hippocrates not only rescued the profession from the hands of ignorance and superstition, but in his works has left a legacy of great value to the surgeon, as well as to the physician; and, although they are the writings of the most ancient author whose pages are preserved, and written at a period when the structure of the human body, and the functions of the animal economy, were but imperfectly understood; they are the writings of a master, and like the tablets whence he collected many of his observations, they deserve, even at this day, a place in the temple of science, where all can read and profit from the valuable truths they contain.

Among the surgical works of Hippocrates are, a treatise on *Wounds*, a book on *Ulcers*, another on *Fistulas*, a fourth on *Fractures*, and a fifth on *Dislocations*. His observations on abscess, ulcers, and wounds, show him to have been an accurate clinical observer. His work on the joints and dislocations, contains many practical remarks of great value on those subjects. His aphorisms contain principles which are received as so many axioms in physic and surgery; and, at this day, constitute the subjects of academic exercises in the most distinguished universities.

He performed the operation of blood-letting in different parts of the body; and, although he did not understand the circulation of the blood, his observations on the effects of this evacuation, and the diseases in which it is most useful, are judicious and correct. In apoplexy, palsy, inflammatory diseases, iliac passion, quinsy, pleurisy, and inflammation of the abdominal viscera, &c. he made free use of this remedy. In quinsy, and in injuries occasioned by falls, he attached so much importance to blood-letting, that he, in some instances, bled his patient in *both arms*, and frequently *ad deliquum*.

In the treatment of fevers, he was no less cautious in the use of the lancet, than he was bold to employ it in those diseases in which it was decidedly indicated. At the same time that his ignorance of the circulation of the blood occasionally led him into error, the indications of blood-letting, and the circumstances in which it was most advantageously performed, did not escape his notice. The season of the year, the age of the patient, and habit of body, were no less

regarded

regarded by Hippocrates than they are by physicians and surgeons of the present day. But he was not confined to the use of general blood-letting; he also made use of cupping and scarification for the removal of local diseases.

Hippocrates also performed many other operations, which at this time, notwithstanding the present improved state of anatomy, call for considerable skill and judgment in the operator.

He opened deep-seated abscesses; he performed the operation of tapping in dropsy, and of trepanning in fractures of the skull and injuries of the brain. His aphorism upon the comparative pain and fever, before and after the formation of matter, and which he made the guide of his practice, abundantly shows his accurate knowledge of this subject. His observations on wounds of the head, teach us the great caution with which he formed his prognosis of the event. However small or inconsiderable the injury may appear, he observes, they require attention in their treatment, and care in the practitioner, not to hazard a hasty prognosis of the issue. This observation would do credit to the most enlightened surgeon of modern times; and cannot fail to impress us with an exalted opinion of the talents and experience of Hippocrates.

The *actual cautery* was also one of his favourite remedies, in the treatment of chronic diseases. In a case of ascites, he cauterized the belly eight times, during the forming state of this complaint. The physicians and surgeons of this day have yet to learn many valuable lessons from Hippocrates, and other ancient physicians, relative to the use of this remedy. The successful practice of Pouteau, of Lyons, (see his surgical essays,) who has revived the use of this external application; and the advantages which have resulted from the use of caustics, as prescribed by Mr. Pott, in diseases of the spine, tend to establish the importance of the principle upon which the actual cautery was prescribed, and has been found useful.

Many other local applications were made use of in the practice of Hippocrates, that are still employed by the physicians and surgeons of this day.

In an inflammation of the throat, he caused his patients to inhale the steam arising from the infusion of stimulant and aromatic herbs: upon other occasions, he directed fomentations to be applied to the parts affected. The warm bath, fomentations, gargles, ointments, cataplasms, and collyria, were also among the local remedies prescribed by this celebrated physician.

The important operation of lithotomy appears, also, to

have been performed in the time of Hippocrates; for, in the oath administered to his pupils, he exacts from them the obligation, that they *would not cut for the stone.*

Although the operation, as performed by the surgeons of that day, was apparently simple, compared with the present lateral operation; still, from their imperfect knowledge of the structure of the human frame, it must necessarily have been attended with considerable danger. Even, as improved at this time, it is an operation frequently productive of dangerous consequences; and, in some instances, proves fatal in the hands of the most skilful surgeon. The conduct of Hippocrates, therefore, in prohibiting his pupils from performing so important an operation, at the time the anatomy of the body was imperfectly understood, must give us a high opinion of the correctness of his judgment and his prudence, at the same time that it attaches an additional value to his works.

In the interval of time between Hippocrates and Celsus many surgeons are recorded by Galen and other historians; but, as they appear to have made but few and inconsiderable improvements in the art, we will pass over this period to the Augustan age, which may also be denominated the Augustan age of medicine as well as of science. Such it was rendered by Celsus, the Roman Hippocrates.

Celsus was not only distinguished for his professional acquirements, but ranks among the most celebrated writers of antiquity. Whoever, therefore, wishes to become acquainted with the state of medicine and surgery, prior to the fall of the Roman empire, or to read the Latin language, which, in that day, attained its greatest purity and elegance, will peruse his valuable pages, which have gone through almost innumerable editions, and have been translated into almost every language employed as the vehicle of learning. Celsus not only exhibits an historical view of the state of medicine, as practised before his time, but has added much original observation, and many improvements, to those of his predecessors. Although he has copied much from the writings of Hippocrates, he was not so blindly attached to his works as not to discriminate between his merits and his defects. On the contrary, while he gave the opinions and practice of others, he thought for himself. His works are accordingly esteemed the most valuable repository of the medical learning of his time. He treats of the healing art, in all its branches of *diet*, *medicine*, and *surgery*. His seventh and eighth books are exclusively devoted to the latter subject, and contain a systematic view of most of the diseases and operations which fall to the province of the surgeon.

In

In his observations on *wounds*, *abscesses*, and *ulcers*, he describes the various appearances they assume, and adapts his remedies to the different stages, with as much correctness as is done by the surgeons of this day. To wounds, accompanied with hemorrhage, he applied constant pressure, by means of a sponge, wet with vinegar. If necessary, he applied the ligature to the bleeding vessel, or closed its orifice by the actual cautery. When attended with inflammation, he enjoined abstinence upon the patient, and covered the part affected with cold applications. In *contusions*, he freely opened the bruised part, or dilated the wound for the evacuation of the blood effused, when there was no danger of injuring the larger blood-vessels, or important nerves. In gangrene, occurring in the extremities, he cut down to the sound parts; and, if he failed by that and other efforts to conquer the disease, he recommended the amputation of the limb. To promote the suppuration of abscesses, he employed poultices, composed of barley-meal, marsh-mallows, or linseed and fenugreek; but when opened, he prescribes stimulant food and drinks, and to the parts he applied honey and other digestives. When the lips of the wound became callous, its surface spongy and insensible, and the discharge of an unhealthy appearance, he washed the wound and the surrounding parts with *wine*. From this practice of Celsus, the surgeons of the present day may learn an important lesson in the treatment of wounds. He also describes the symptoms of that dangerous abscess the *carbuncle*, and advises the actual cautery to corrode the gangrened part. This practice is now superceded by the internal and external use of the peruvian bark, and other stimulants. In erysipelas, he applied cerussa, with the juice of *solanum*, a powerful sedative. In the treatment of the callous ulcer, he removed the hard edges with the knife, or corrosive applications. In cancers, and in the cancerous ulcer, he prescribed the auripigmentum or arsenic. In fistulous ulcers, if tortuous in their course, with the probe as his guide, he ascertained their direction, divided them freely with the knife; and, upon exposing their internal surface to view, he removed the callous portions, and applied such dressings as were calculated to promote the growth of new parts. In other instances he effected a cure by the use of stimulant and corrosive injections. In caries of the bones, he directs them to be perforated as deep as the disease extends, and afterwards a hot iron to be passed into the foramina, made by the perforator, for the purpose of drying and separating the diseased portions; but if the caries and blackness extend through the body of the bone, he advises a total separation of the part affected.

In

In his chapter on tumours, he described them according to the nature of their contents, and advises their extirpation. The *steatomatous* tumour, from the firmness of its consistence, he directs to be carefully separated from the skin and surrounding parts, and to be removed entire, without dividing the sac inclosing it. He then directs the lips of the wound to be brought together, and an application made to agglutinate the divided parts, at the same time making use of wine and other external stimulants to promote their union. In this treatment, we see the improvements of the present time, of *saving skin*, and *healing by first intention*. That this was the object of Celsus appears evident, from a subsequent direction which he gives, in case any portion of the sac should be left behind, as in the removal of the melicerous or atheromatous tumour; in which case, he orders the wound to be left open, and digestives to be applied, for the purpose of throwing off the remaining portion of the sac. In the atheroma of the eye-lids, in which the sac adheres very slightly to the surrounding parts, he directs the teguments to be divided, without wounding the sac, and the tumour to be removed by the fingers, without further dissection; for, he adds, it easily separates. The same mode of treatment is recommended in the work of Mr. Hey, as a valuable improvement of the present time. In his chapter on diseases of the eyes, Celsus treats of the *cataract*, and directs it to be depressed by the needle; and if it rises again, to be broken into pieces; the practice recently adopted by the most eminent surgeons. In *ophthalmia*, he prescribes venesection, purgatives, abstinence, low diet, rest, and a dark room. He washes the eye with collyria, composed of an infusion of roses and the poppy. When attended with defluxion, he employs astringents, cupping, and the actual cautery, to the temple and forehead, analogous in its effects to blisters and issues, as at present prescribed, under similar circumstances.

Celsus also performed the operation of the hare-lip. He extirpated the polypus from the nose; he removed, by excision, the enlarged and indurated tonsils; he diminished the elongated uvula; and he removed the bronchocele, by caustics and the knife. But the skill of Celsus was not confined to the smaller operations of surgery.

In diseases of the bones of the head, and in injuries of the brain, his practice was such as the most eminent surgeons of the present day must approve. The symptoms which are occasioned by a fracture of the skull, are minutely detailed. He is the first who notices the rupture of the vessels of the brain, and the other effects produced by a concussion without fracture of the cranium. He also observes, that the evidence

of

of such injury, is generally a pain immediately above the part affected; and, upon exposing the bone to view, he adds, it is found of a *pale colour*. This characteristic symptom of effusion of blood, or of the formation of matter between the cranium and the membranes of the brain, is mentioned in the works of Mr. Pott, but without the credit due to that accurate observer. In cases of this sort, and in fractures of the skull, it was the practice of Celsus to make a free crucial incision of the integuments; by which alone, in many instances, the patient was relieved. At the same time, he condemns the precipitate conduct of his predecessors, in proceeding to the use of the trepan, without waiting to observe the effects of other remedies.

(To be continued.)

For the Medical and Physical Journal.

Case of Abscess of the Liver, consequent to Injury of the Head; by M. REYNAUD.

ON the 15th of March last, Louis Billard was at work in the hold of the ship Hannibal, and, whilst in a sitting posture, a wedge of wood three pounds in weight fell from the height of fifteen feet on his head, which produced a contused wound, about an inch and half long, across the posterior and superior right parietal bone, penetrating no deeper than the hairy scalp, and from which neither vertigo nor insensibility followed. He was, however, taken to the hospital, bled, and put on low diet. On the 25th the wound healed; and on the 27th he was to have been discharged, but when M. Reynaud visited him on that morning, he had considerable fever, thirst, furred and clammy tongue, bitter taste in the mouth, nausea, disposition to vomit, dry hot skin, pain across the forehead. M. R. conceiving it to be a bilious attack, gave him *barley water with a grain of emetic tartar*, which produced vomiting, but did not relieve the nausea.

28th.—Symptoms were the same. Medicine continued.

29th.—Tongue dry; great thirst; bowels constipated; frequent pulse; *pain in right hypochondrium, extending to the right shoulder*; eyes of a yellow tinge, as was also the whole surface of the body; stomach rejected every thing, and the man frequently produced vomiting by introducing his fingers into his throat. Lemonade and whey were prescribed, two emollient enemas and a large poultice to the seat of pain.

30th.—Symptoms the same: *great pain experienced in breathing*; pulse small. *Four leeches* were applied to the right

right hypochondrium, and the bleeding encouraged for an hour, after emollient drinks and enemas were given. In the evening he was a little better.

31st.—Great oppression; sense of suffocation; could only rest in an upright position; small weak pulse; a sensible elevation at the right hypochondrium; emollients continued; tumour poulticed; he vomited every thing.

April 1st.—Tongue dry, yellow; great pain on the right side; great difficulty in breathing. Slight relief was experienced from the warm bath; prescriptions continued.

The patient's sufferings rapidly increased till the 3d, when the disease assumed a most afflicting appearance: he was in inexpressible agitation, breathed with the greatest difficulty, and the pulse was scarcely to be felt. In the evening he sunk (under this murderous treatment!—*Translator*).

On examination after death, nothing preternatural was discovered in the head. The liver was of an enormous size, turgid; and the gall-bladder filled with bile. The large lobe adhered in many places to the diaphragm, and three abscesses were found in it, the largest of which was close to the ligamentum coronarium. There was no communication from the liver to the thorax. The stomach was inflamed, and contained a little grumous blood. The other abdominal viscera were in their natural state.

The right cavity of the thorax contained about a pint and a half of a fluid similar in kind to the matter of the abscesses of the liver. The right lung had numerous adhesions to the diaphragm; the left lung retained its natural colour, and the adhesions of former inflammations. There was no disease about the heart.—*Journale Generale de Med.*

For the Medical and Physical Journal.

Case of Vomica cured by the Operation for Empyema.

A MAN, 43 years of age, of a sanguineous temperament, after having experienced on the 24th of October pains in his kidneys with general indisposition, was seized on the 28th with a stitch in the side, which in a few hours propagated itself to all the right side of the chest, accompanied by a dry cough and fever. These symptoms were not relieved by the treatment employed, but continued eleven days, at which time they were exchanged for copious perspiration, and the expectoration of very thick and black matter. During the remainder of the month these last symptoms diminished. The perspirations in particular were confined to the pit of the stomach, but at the same time the patient

began to experience cold chills and slight hectic fever. On the 1st of December, being on horseback, after violent coughing, he spit blood in large quantity. From this time he brought up a large quantity of pus and grumous blood, sometimes by expectoration, and at others by a kind of vomiting. At the end of this month two little inflammatory tumours, of the size of a pigeon's egg, appeared on the margin of the arms, which were speedily resolved, and replaced by others of the same kind on the external and lower part of the fore-arm. These disappeared like the former, but there remained some time a swelling of the wrist and palm of the hand of the right side.

During the month of January the patient continued to get worse. On the 23d he was seen by M. Jaymes, when the following particulars were noted. He was greatly extenuated; the nails were livid; the eyes and cheeks were hollow, the latter of a reddish brown colour; his appetite was gone; tongue white; and he could lay only on the left side. There was no diarrhœa. He had slow fever; heat in the throat; cough; purulent expectoration; difficulty of breathing. A portion of the integuments on the right side was emphysematous, and a manifest gurgling was heard in the corresponding cavity. Between the fifth and sixth true ribs a small tumour appeared, which projects at every fit of coughing, and disappears in their interval. The lower extremities were œdematous. M. Jaymes, convinced by the assemblage of these symptoms of the existence of fluid in the right cavity of the chest, advised the patient to submit to the operation for empyema.

On the 1st of February, three months after the attack of the pleurisy, he proceeded as follows:—The patient being placed on the left side, M. Jaymes made, with an ordinary bistory, an incision in the projecting part of the integuments, viz. between the fifth and sixth rib. Some air escaped. By a second stroke of the knife an incision was made perpendicularly down to the superior margin of the sixth rib, and, accompanied by the fore finger, the surgeon divided the intercostal muscles and the pleura, for the space of half an inch. At the opening of the chest, the air escaped in abundance, but at first nothing else, although a sound introduced into the cavity left no doubt of its having been opened. Nevertheless, three hours after, the patient having made great efforts at expectoration in consequence of the cough, about a pint of fluid of a reddish colour, mixed with membranous flocculi, suddenly escaped from the wound, and forced away the dressings with which it was covered. On the following morning the matter was white and puriform. The three following days four

more pints were evacuated by the wound. About two pints afterwards came away during the same space. The pus now became serous, and diminished in quantity. On the twentieth day the discharge was about a spoonful at each dressing, and completely disappeared at the fifty-fifth day from the operation.

During this time the patient was dressed twice in twenty-four hours. Injections of honey mixed with water were used for six weeks, which frequently, instead of returning by the wound, were evacuated by expectoration. From the moment of the operation the patient began to show signs of amendment. From this time there was an evident diminution in the expectoration emphysema, heat in the throat, and slow fever. The appetite returned, and the patient could lay on his right side, which was before impossible. On the fourth and the seventh he had favourable perspirations, and again on the twentieth, twenty-second, and about the thirty-seventh day of the operation.—*Journale de Medicine.*

For the Medical and Physical Journal.

Extracts from the Report of the Committee employed to visit Houses and Hospitals for the Confinement of Insane Persons, with Remarks; by PHILANTHROPOS.

IT was announced some time ago in the Medical Journal, that a meeting had been holden for the purpose of establishing an Asylum for the Care and Cure of the Insane in London. The necessity of such a measure, at that time, did not appear very obvious to those persons who were not acquainted with the nature and regulations of the existing establishments, either public or private, for the reception of insane persons, or of the great number of individuals requiring confinement. A committee was appointed to investigate the subject, and they have made a report which every philanthropist would wish to be made as public as possible, because it displays a system of negligence and cruelty which must excite universal horror, and consequently cause its immediate abolition. To enable the profession to form a just opinion of the case, as well as to appreciate the meritorious efforts of the committee, a few extracts from their report will for the present suffice. They will attest the labours of the committee, and tend to explain the probable benefit which will result from their exertions, whilst there can be no doubt that the parties who are culpable will be sufficiently aware of the effect of public opinion, very speedily

to adopt more humane and effectual measures for the relief of the unfortunate sufferers entrusted to their care, than has hitherto been the case.

From the report of the committee, it appears that the usual modes of confining persons afflicted with insanity, are four:

1. At their own homes, or in the houses of their friends, attended by a keeper.

2. In work-houses, in which the patients are principally parish paupers.

3. In private receptacles.

4. In public hospitals purposely elected.

Of the first class, the committee, from the difficulties of obtaining information, forbore to make inquiry. Of the second class, they state that the patients "are generally kept in gloomy and comfortless confinement." But they do not point out any very important abuses.

Neither do they seem to have met with much cause of complaint in their investigation into the third class, or those confined in private houses.

But that part of their report which includes the public hospitals, deserves the most profound attention. "The two great public hospitals, St. Luke's and Bethlem, and the ward for the insane at Guy's Hospital, have been visited by the committee. The ward of Guy's Hospital, which is calculated to receive twenty female patients, termed incurables, is a separate building from the general hospital; and is, by being adapted to afford the keeper a complete and constant inspection of every part, by superior modes of ventilation, and in all other respects more suitably constructed than any erection for the insane within the bills of mortality. The management also appeared much better to the committee than what they observed in any other establishment. St. Luke's Hospital is by no means equal in accommodation to the ward at Guy's. Notwithstanding the superior activity and diligence of the present master, Mr. Thomas Dunston, and the great attention paid to cleanliness and ventilation, which the committee cannot praise too highly, the defects of the building must preclude him from realizing the judicious views which it appears, by his evidence before a committee of the House of Commons, in 1807, he entertains of the disease. 'Much,' says he, 'is certainly to be done by management; but it is impossible, on this head, to lay down a general rule; each effort must be adapted to the peculiar indisposition; it is necessary to check some, to encourage others, and to animate all with a hope of recovery.' This edifice has most of the radical evils of inadequate construc-

tion. The day-rooms are too small for the winter season, and the windows of most of the cells are unglazed; only one airing ground is allotted to each sex; and the galleries, all communicating with each other, preclude proper classification."

The committee encountered great difficulties in obtaining a view of the interior of Bethlem Hospital; at length, on Monday the 25th of April, they were introduced by one of the governors, being refused admission unless so accompanied; but he felt himself unable to attend them through; his feelings were quite overpowered. On the 2d of May the attempt was renewed, and the following is the description of what they witnessed. "One of the side rooms contained about ten patients, each chained by one arm to the wall; the chain allowing them merely to stand up by the bench or form fixed to the wall, or to sit down on it. The nakedness of each patient was covered by a blanket-gown only. The blanket-gown is a blanket formed something like a dressing gown, with nothing to fasten it with in front; this constitutes the whole covering; the feet even were naked. One female in this side room, thus chained, was an object remarkably striking; she mentioned her maiden and married names, and stated that she had been a teacher of languages. The keepers described her as a very accomplished lady, mistress of many languages, and corroborated her account of herself. The committee can hardly imagine a human being in a more degraded and humiliating situation, than that in which they found this female, who held a coherent conversation with them, and was, of course, fully sensible of the mental and bodily condition of those wretched beings who, equally without clothing, were closely chained to the same wall with herself. Unaware of the necessities of nature, some of them, though they contained life, appeared totally inanimate and unconscious of existence. The few minutes which the committee passed with this lady, did not permit them to form a judgment of the degree of restraint to which she ought to be subject; but they unhesitatingly affirm, that her confinement with patients, in whom she was compelled to witness the most disgusting idiocy, and the most terrifying distraction of the human intellect, is injudicious and improper. She entreated to be allowed pencil and paper, for the purpose of amusing herself with drawing, which were given her by one of the committee.

"Many other unfortunate women were locked up in their cells, naked, and chained on straw, with only one blanket for a covering. One, who was in that state by way of punishment, the keeper described as the most dissatisfied patient

tient in the house; she talked coherently, complained of the want of tea and sugar, and lamented that her friends, whom she stated to be respectable people, neither came to see her, nor supplied her with little necessary comforts. The patients generally complained much of being deprived of tea and sugar. On leaving the gallery, the committee inquired of them, whether the visit had been inconvenient or unpleasant; they all joined in saying no, but (which was sufficiently apparent) that the visit of a friend was always pleasant.

"In the men's wing, in the side room, six patients were chained close to the wall—five hand-cuffed, and one locked to the wall by the right arm, as well as by the right leg; he was very noisy. All were naked, except as to the blanket gown, or a small rug on the shoulders, and without shoes; one complained much of the coldness of his feet,—one of the committee felt them—they were very cold. The patients in this room, except the noisy one, and the poor lad with cold feet, who was lucid when the committee saw him, were dreadful idiots. Their nakedness, and their mode of confinement, gave this room the complete appearance of a dog-kennel.

"From the patients not being classed, some appear objects of resentment to the others. The committee saw a quiet civil man, a soldier, a native of Poland, brutally attacked by another soldier, who, we were informed by the keepers, always singled out the Pole as an object of resentment,

"Chains are universally substituted for the straight waistcoat; but in Guy's Hospital, a leather belt is used, with side straps to confine the arms, which in many instances is greatly superior.

"In the men's wing were about 75 or 76 patients, with two keepers and an assistant; and about the same number of patients on the women's side. The patients were in no way distinguished from each other as to disease, than as those who were not walking about, or chained in the side rooms, were lying stark naked upon straw, on their bedsteads, each in a separate cell, with a single blanket or rug, in which the patient usually lay huddled up as if impatient of cold, and generally chained to the bed-place, in the shape of a trough. About one fifth were in this state, or chained in the side rooms. In the private houses, the patients are universally made to rise, to wear clothes, to take exercise, and, from being confined in a waistcoat when necessary, are prevented injuring each other.

It appeared, that the wet patients, and all who were inclined

clined to be a-bed, were allowed to do so, from being less troublesome in that state than when up and dressed.

The end window towards Fore-street was the chief source of entertainment to the patients; they seemed greatly to enjoy the sight of the people walking, and to derive great pleasure from the visits of the committee.

In one of the cells of the lower gallery, the committee saw William Norris. He stated himself to be 55 years of age, and that he had been confined about fourteen years; that in consequence of attempting to defend himself from what he conceived improper treatment of his keeper, he was fastened by a long chain, which, passing through a partition, enabled the keeper, by going into the next cell, to draw him close to the wall at pleasure; that, to prevent this, Norris muffled the chain with straw, so as to hinder its passing through the wall; that he afterwards was confined in the manner the committee *saw him*, viz. a stout iron ring was rivetted round his neck, from which a short chain passed to a ring, made to slide upwards or downwards on an upright massive iron bar, more than six feet high, inserted into the wall; round his body, a strong iron bar, about two inches wide, was rivetted; on each side the bar was a circular projection, which being fashioned to, and enclosing each of his arms, pinioned them close to his sides; this waist-bar was secured by two similar bars, which passing over his shoulders were rivetted to the waist-bar both before and behind; the iron ring round his neck was connected to the bars on his shoulders by a double link; from each of these bars another short chain passed to the ring on the upright bar. We were informed he was enabled to raise himself, so as to stand against the wall, on the pillow of his bed, in the trough-bed in which he lay; but it is impossible for him to advance from the wall in which the iron bar is soldered, on account of the shortness of his chains, which were only twelve inches long. It is conceived equally out of his power to repose in any other position than on his back, the projections which on each side of the waist-bar enclosed his arms, rendering it impossible for him to lay on his side, even if the length of the chains from his neck and shoulders would permit it. His right leg was chained to the trough, in which he had remained thus encaged and chained more than twelve years. To prove the unnecessary restraints inflicted on this unfortunate man, he informed the committee, that he had for some years been able to withdraw his arms from the manacles which encompassed them. He then withdrew one of them; and, observing an expression of surprise, he said, that when his arms were withdrawn, he was compelled to rest them on the edges

of

of the circular projections, which was more painful than keeping them within. His position, we were informed, was mostly lying down, and that, as it was inconvenient to raise himself and stand upright, he very seldom did so; that he read a great deal, books of all kinds, history, lives, or any thing that the keepers could get him, the newspaper every day, and conversed perfectly coherent on the passing topics and events of the war, in which he felt particular interest. On each day that the committee saw him he discoursed coolly, and gave rational and deliberate answers to the different questions put to him. The whole of this statement relative to W. Norris was confirmed by the keepers."

On a subsequent visit they observed that the whole of the irons had been removed from Norris's body, and that the length of the chain from his neck, which was only 12 inches, had been doubled.

"In the public hospitals, it is customary to lock up the patients in their cells at dusk, this in winter is soon after four o'clock; and the cells are not opened until seven o'clock the next morning. The coldness of the season sends the patient into his bed, however he may incline to remain awake; to him, who is darkness and utter confusion within, this is no privation of comfort, no infliction of sorrow; but, surely, fifteen hours of dreary solitary confinement, in a dark cell, must tend to retard the progress of the convalescent, and to deepen the gloom of the mind, shattered by sorrow.

"If the committee have been pained by the remarkable contrast in management between one of our great public hospitals for the insane, and the larger private houses generally, they have been as forcibly impressed by contrasting the practice of even such houses with the general economy of the '*Friend's Retreat*,' near York; where neither chains nor corporeal punishment are tolerated on any pretext; where the conveniencies provided, both within doors and without, are suitable to patients in any station of life, and every appearance is avoided that can afflict the mind by painful recollection; and where regulation and controul are governed by the experienced efficacy of this important principle, that whatever tends to promote the happiness of the patient, increases his desire to restrain himself."

It is needless to make further extracts from this most important report. The committee have completely ascertained many gross abuses, have proved the whole system of management in one of our largest hospitals to be radically bad, and therefore have the strongest grounds for recommending a new asylum, to be conducted after the simple and mild, but

but successful, plan of the "Friend's Retreat," at York; an institution which is likely to become instrumental in reforming the erroneous system of many others that have been longer established, but whose managers have not been influenced by humane and enlightened principles.

Before concluding this paper it may be proper to remark, that the committee have allowed some uncandid observations on physicians to escape them. If the college of physicians have illiberally secured to their own *fellows* the privileges and emoluments derived from visiting and licensing receptacles for lunatics, if they have on some occasions exercised their power in an arbitrary manner, or have not always evinced that sagacity and discretion which ought to characterise their learned body, the whole profession, surely, ought not to suffer. The committee also appear to have been biassed by the reports of certain keepers, and, because medicine seldom is effectual in the cure of insanity, they have too hastily drawn a conclusion, that physicians are not better qualified for superintending and directing the management and treatment of insane persons, than keepers or persons destitute of a medical education. They have also hinted at sordid conduct on the part of physicians, which, however applicable to a very few, can never attach to the profession at large; a profession which (as far as individuals are concerned, for corporations must be excepted) is exercised on the most liberal principles, and which, however, attempted to be stigmatised and cavilled at, contains in proportion to its numbers more disinterested and honourable men than any other, though, notwithstanding certain splendid exceptions, they are hardly treated and poorly remunerated.

London, July 14, 1814. PHILANTHROPOS.

COLLECTANEA MEDICA,

CONSISTING OF

ANECDOTES, FACTS, EXTRACTS, ILLUSTRATIONS, QUERIES, SUGGESTIONS, &c.

RELATING TO THE

History or the Art of Medicine, and the Auxiliary Sciences.

On the Use of Venesection in Diabetes Mellitus. By JOSEPH AYRE, M.D. Physician to the Hull General Infirmary, and to the Penitentiary, and to the Lying-in Charity of Hull, &c. &c.

MR. C. of Castlethorpe, near Brigg, in Lincolnshire, farmer, aged 34, of laborious and temperate habits, and of robust form, was first seized with symptoms of diabetes mellitus, on the third day of a journey, in which he had undergone considerable bodily

daily fatigue, and been exposed to much cold and rain, having taken, during that time, but a very few hours of natural repose. About the middle of April 1811, and six weeks after the attack, he applied to Mr. Rudkin, a respectable surgeon, of Brigg, and shortly after a physician of this place was consulted. From the commencement of the disease, the thirst had rapidly become urgent, and at this period was literally unquenchable, demanding, as ascertained by several trials, from 35 to 40 English pints of water, as the smallest quantity that could be dispensed with in the 24 hours. The urine was pale, and very sweet, corresponding, as it was conjectured, in quantity with the fluids taken, and voided almost involuntarily. The pulse small and quick; tongue white; skin very dry; appetite voracious; and bowels habitually and obstinately costive.

Immediately after consulting these gentlemen, he was put upon an animal diet, and directed to avoid all vegetable matters, and to take lime-water for his common drink. During the space of nine months, he strictly adhered to this regimen, and took the following medicines with the utmost regularity, viz. Peruvian bark, rhatany root, extract of logwood, alum, gum kino, sulphate of copper, tincture of cantharides, opium combined with sodorifics, the volatile and vegetable alkalies, the sulphuret of potass, and hepatized ammonia, but with only occasional and very trifling benefit. Towards the close of December, I was consulted, and found him labouring under the disease in its most aggravated form. His thirst was excessive, and such was its intensity towards evening, that his frequent calls for drink and micturition precluded all repose, until many hours after midnight. He was considerably reduced in flesh, and incapable of walking but a very short distance. His urine was highly saccharine, and in other respects indeed so altered, that it was his common practice to prefer it for rinsing his mouth, as the most effectual means he possessed for removing its clamminess. The voraciousness of the appetite, and the unperspirable state of the skin were unabated, and the bowels were still very costive. Sensible that a very full trial had been given to the ordinary remedies for this disease, and under the full assurances that nothing but death could result from their continuance, I determined to adopt a different plan, and having explained my views to the patient, and obtained his consent to the measure, I directed him to lose ℥xviii. of blood. This quantity, for reasons that need not be explained, was taken in two bleedings, viz. on the 6th and 10th of January, by Mr. Rudkin, with whom I corresponded, and to whom I am much indebted for the following reports, as well as for the obliging and intelligent manner with which he seconded my wishes.

1812. January 6th—13th.—After the first bleeding, the patient's pulse was increased from 80 to 96 in a minute, and is now 100, and weak. The symptoms of the disease are considerably abated; thirst not so excessive; the tongue, which has been white from the commencement of the complaint, is now but little so; urine less saccharine, particularly of a morning. The blood was of a dark colour, coagulating slowly, and the serum thick and adhesive, and of a

milky appearance, but most so at the first bleeding. Lime-water and animal diet continued, with an allowance of porter at the patient's request. The bowels kept regular by means of the oleum ricini.

13th—18th.—From the favourable change produced by the first bleeding, 16 ounces were taken yesterday. The blood was strongly marked with the buffy coat, but the pulse did not rise. The improvement, however, upon the whole is considerable.

18th—23d.—Since the last report, the thirst had increased, and the urine had become more abundant and saccharine; 16 ounces of blood were taken yesterday. The buffiness less considerable than at former bleedings, but the good effects are more considerable. Mr. C. feels his spirits and strength much improved, and thinks himself considerably better after this bleeding than after any of the former; the pulse is also stronger and less frequent, and the tongue clean.

23d—30th.—From the very considerable benefit derived from venesection, 20 ounces were taken on the 26th, which exhibited no buffiness on the surface. In the evening, feeling himself languid, he ate very heartily of fat meat, which appeared to disorder his stomach, and on the following day he complained of dizziness, and increased thirst. Urine sweet; pulse 110, and feeble; and tongue white. A bolus of calomel was given, which afforded relief, and the symptoms have gradually abated in violence.

January 30th—February 7th.—Has considerably improved since the last report. Yesterday 18 ounces of blood were taken, which was florid and free from siziness, though the serum was still milky; pulse 90, full, and stronger; has gained nine pounds in weight since he was first bled.

7th—13th.—For several days past has pursued his farming work; 16 ounces were taken yesterday, which was without buffiness, but the serum was still milky. Feels his spirits and strength greatly improved; sleeps well; thirst quite moderate, though the tongue is white, and the skin continues dry; urine occasionally saccharine, though not immoderate in quantity, having seldom occasion to rise more than once in the night.

13th—21st.—From an observation made by Dr. Watt, that an animal diet retarded the cure, a portion of vegetable food was begun with on the 16th. In the evening his thirst was increased, and the urine became sweet, with much prostration of strength. The night was restless, and the appetite was again voracious. These symptoms continued to increase with such violence, as to render a return to an animal diet indispensable: 18 ounces of blood were also taken, which was very sizy, but which had the immediate effect of removing the urgent symptoms. At one time, during the three days in which he used the vegetable diet, such was the intensity of his thirst, that he drank a gallon of water in 20 minutes.

21st—30th.—Since last report, nearly all the symptoms of diabetes have disappeared. The thirst and appetite are quite natural;

urine in all respects natural; sleep quiet; pulse 86, and of good strength; spirits excellent; skin moist.

February 30th—March 27th.—Since last report there has been no return of the diabetic symptoms, and the general health and strength are so much improved, that Mr. C. goes about the ordinary business of his farm. After some laborious exertions on the 16th, he had a little increase of thirst; and, at his own request, 16 ounces of blood were taken on that day. Has gained seventeen pounds in weight since he was first bled.

March 27th—June 15th.—Since last report has had occasional returns of thirst, for which he was bled on the 2d of April, to the amount of 16 ounces, with instant relief, and 12 ounces were taken on the 9th, and the same quantity on the 30th of May, with the same result. Since that time, he has continued perfectly well, engaging in the most laborious employments of his farm, and rising at three or four every morning.

After the lapse of many months from the date of the last report, I had two or three times the satisfaction of seeing and learning from my patient, that he had continued perfectly well, and had acquired farther increase of weight. In the spring of this year, however, and about twelve months after his recovery, he came over to Hull for my advice, when I learnt that he had been labouring under a return of his disease for a few weeks. His complaint was now in many respects different from the former state of it. The common symptoms of diabetes mellitus were much less urgent, but the debility and languor were greater, and, what was still worse, there was a tightness in the chest, attended by dyspnœa and cough. Medicines were ordered for the pectoral symptoms, and 16 ounces of blood were taken, which afforded some little relief. Shortly after this, he was attacked by a disease of an erysipelatous nature, at that time prevailing, in which small blisters arose in different parts of his body, attended by fever, and followed by troublesome sores. I now saw him again, and found his pectoral symptoms much the same, but his debility much greater, and evidently increased by venesection, which had again been tried. It was at this time I learnt from him, with not less surprise than regret, that he had been in the practice, for many months past, of eating a portion of flour-pudding daily, and of making an unsparing use of potatoes. A strict adherence to an animal diet was recommended, but, under the very unfavourable circumstances then existing, it gave but little promise of benefit. In fact, the debility and other symptoms increased. The bold but successful practice employed in his former attack was now no longer admissible. The fatal crisis appeared fast approaching. During the succeeding fortnight he became gradually worse, and, towards the close of it, his dyspnœa was suddenly and alarmingly increased, so as to demand an attempt at relief by means of venesection. This however failed, and he shortly after became comatose, and in a few hours expired.—*Edinburgh Med. and Surg. Journal.*

Report of the Progress of the Sciences in France in 1813; by J. C. DELAMETHERIE.

Animal Physiology.—On the Influence which the Temperature of the Air exercises in the Chemical Phænomena of Respiration.

RESPIRATION has been latterly regarded as a kind of combustion, viz. that of the carbon and hydrogen contained in the venous blood. The oxygen absorbed by this combustion forms carbonic acid and water.

It has been endeavoured to ascertain the quantity of atmospheric air which a man of a middling stature inspires at each inspiration, and expires at each expiration. It has been supposed that it was from 20 to 30 and even 40 cubic inches; but I have shown that this supposition is not correct. A man of a middling stature inspires only a few inches of atmospheric air. Now the atmospheric air contains only about one-fifth oxygen, or 0·21.

In the act of respiration a very small portion of this oxide inspired is combined with carbon, and forms carbonic acid.

Another portion of this oxygen is combined with a portion of inflammable gas, and there is a production or disengagement of water. But the greater part of this light portion of oxygen is not combined, and it is found in the air expired mixed with carbonic acid.

But Delaroche has discovered that there is a *production of azote*. He made a great number of experiments in order to determine the influence which the temperature of the air exercises in the chemical phenomenon of respiration. He placed at different temperatures animals in *manometres* or glass vessels with large apertures, hermetically closed by copper plates and screws. If we compare, he says, the results of the experiments made on one and the same animal placed in the same circumstances and at *different temperatures*, we shall see that almost in all the experiments upon the cold-blooded animals, the quantity of oxygen absorbed was a little greater when the temperature was low than when it was high.

The difference between the quantities of carbonic acid formed at different temperatures is still less considerable.

In all cases there is less carbonic acid produced than oxygen absorbed. *I concluded*, he says, *with M. Berthollet, that there was a production of azote.*

In an experiment made upon a hare, the manometre contained 0·7900 azote, 0·2100 oxygen.

After the experiment, the azote was 0·7991, the oxygen 0·1516, and the carbonic acid 0·0416.

There was therefore a production of 0·0091 of azote, and 0·054 of oxygen absorbed. I had remarked the same phenomena, and I have observed in my Essay upon pure Air, that in the air expired there was always a production of a portion of *impure air*, the azote of the new nomenclature.

Spallanzani has proved that a contrary effect takes place in the cold-blooded animals. My experiments, says M. Delaroche, prove also

also that heat augments in a most remarkable manner the activity of respiration in these animals. The quantity of oxygen absorbed by frogs exposed to a heat of 27° has been in one experiment *double*, and in the other *quadruple*, to what it was when the external temperature did not exceed six or seven degrees.

Animal Heat.—Respiration being regarded as a kind of combustion, it has been considered as the principal cause of the heat of animals; but I have shown that too much stress has been laid on this cause.

1. *a.* We find that a man of middling stature only takes in at every inspiration a few cubic inches of atmospheric air. Now atmospheric air contains but little more than one-fifth of oxygen, or 0·21.

b. There is but a small quantity of this oxygen combined in respiration, certainly less than a cubic inch.

2. *a.* A man who sleeps tranquilly takes cold, although he breathes quite at his ease.

b. If he takes exercise, he acquires heat, and even perspires.

c. An animal exposed to a severe cold may perish if it does not take exercise. If, on the contrary, it moves or carries burdens, it preserves its life.

d. Consequently the muscular motion has the greatest influence on animal heat.

3. Oxygen gas contains very little heat; therefore the small portion which is combined in the act of respiration has produced very little heat.

I have concluded from these facts, that animal heat proceeded but in a very trifling degree from the caloric extricated from the oxygen inspired.

4. If animal heat proceeded from respiration, or from the combustion of the carbon in the act of respiration, the lungs ought to possess a greater degree of heat than the other parts of the system, as Brodie has asserted, which is not the fact. He thinks that animal heat is in a great measure under the influence of the nervous system and of the brain.

In the muscular movements the nervous system is in a state of activity more or less considerable; this is the reason that heat is produced in the animal body.

5. The fermentation of the various animal liquors contributes much to the heat of animals, for we know that every fermentable substance contracts heat. Now all the animal liquors are in a perpetual state of fermentation.

6. There are continual combinations in the animal economy which give new products, such as the phosphoric, uric, sebic, acids, glutine, fibrine, &c. &c. Now all these combinations are uniformly accompanied with an extrication of caloric.

7. The galvanic action is powerfully exerted among the various heterogeneous particles of the bodies of animals which ferment. This galvanism is very intense in the electric eel, &c. and contributes powerfully to animal heat.—*Phil. Mag.*

Fatal

Fatal Case of Hydrothorax, with Appearances on Dissection.
Communicated by Mr. A. ROBERTSON, Surgeon of H.M.S. Cydnus.

THE subject of this case was a man who had spent the greater part of his life in the active duties of a seaman, in almost every quarter of the globe,—a man certainly of an advanced age, (for 54 may be considered so, especially in a sailor,) yet remarkably squat, muscular, hale and strong for his years;—a man who would have been the last suspected to fall a martyr to hydropic affections; yet in him, "with all these appliances and means to boot," did the disease rapidly advance, and prove fatal on the *tenth* day from the very earliest feelings of indisposition!

He first made his appearance on the 17th of October 1813, complaining of an unusual sensation about the cartilago ensiformis, which he distinctly told me was not acute pain. He had first felt it at four o'clock that morning, on getting up to keep his watch. His pulse, tongue, and skin, as also (by his own account) his appetite and bowels, were perfectly natural. Thus no symptom of general or local illness being perceptible, he was sent away, with an injunction to call again, if he should feel himself worse.

He returned on the morning of the 20th October, and stated that the uneasiness in the lower part of the thorax had not left him, but that, on the contrary, it was now attended with slight cough and difficulty of respiration. His pulse and tongue were still natural; the temperature of his skin that of health. In fact, the only apparent symptom was cough, with some expectoration of a viscid tenacious pituita.

Under these circumstances, his bowels were opened, and kept free; diaphoretics also were prescribed, together with the emulsion usually employed in catarrhus benignus. By these he felt somewhat relieved.

No more prominent symptoms appeared till the 22d October. Heretofore his appetite had been good; his face expressive of health; and his tongue clean; but on that day the first was impaired, and the latter white; yet his pulse still preserved its natural tone and velocity. Difficulty of breathing and cough had increased, and the sensation at the scrobiculus cordis had become an oppressive sense of weight. From these particulars, I was led to suspect an incipient effusion of the serous sort, probably (as I then thought) into the bronchial tubes of the lungs: I therefore ordered the tinct. digitalis purp. in such quantity as the state of the stomach would admit; kept the bowels free; and soothed the cough by the same mixture as before.

His complaint seemed to be stationary till the 25th, when early in the morning he was seized with a severe fit of dyspnœa and coughing; his pulse was *now* quick, weak, and small; face pale and anxious; and he felt it impossible to lie in the horizontal posture. A drachm of æther nitros. administered at the time in a glass of peppermint water, gave him instant relief; but the former symptoms became, from that time, more and more violent.

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The disease having now assumed so decided an attitude, the tinct. digital. was increased, the spirit. ætheris nitros. repeated, when dyspnœa, more severe than ordinary, made it necessary; a large blister was applied to the sternum, and two grains of opium exhibited at night to procure sleep.

Neither at this nor at any time during the rapid progress of the disease was there any external anasarca, general or local; nor could fluctuation of fluid be felt in the chest, probably on account of the great firmness of the muscles, and the quantity of adipose substance accumulated over the ribs.

The above remedies were persevered in to the end. None gave him relief, excepting the draughts of æther, and cough-mixture; and the ease they procured him was very transient. He continued to become worse and worse: frequent retching was superinduced by the severity of the cough; his pulse was very quick and weak; debility gained ground rapidly; his stomach was so irritable that it rejected all medicines, and other ingesta but thin sago.

On the evening of the 27th of October, he was seized with a fit of dyspnœa; retching and cough more severe than any of the preceding; and expired suddenly during the paroxysm.

Appearances on Dissection.—On opening the body, I found that very strong adhesions were formed on both sides of the chest, betwixt the pleura costalis and pleura pulmonalis.

Both sacs of the pleura were prodigiously distended with a greenish serous fluid. The quantity was not ascertained by measurement, but I cannot possibly be deceived when I say it was *one gallon and a half!* In dissections of a similar nature, I do not remember to have seen such a profusion of water.

The pericardium contained, as nearly as I can judge, about a *pint* of fluid, of the same appearance with that in the cavity of the thorax. The heart itself was of an enormous size, at least *three times larger* than usual! The blood-vessels distributed on its muscular structure were whitish, and indurated, as if in a state of incipient ossification.

The lungs contained no tubercles, but were in every respect healthy.

The stomach was distended with flatus, but no marks of disease were to be traced on its coats.

The liver and other viscera had their natural appearance.—*Edin. Journ.*

On Sudden Death in Child-Bed, soon after Delivery. By JOHN RAMSBOTHAM, M.D. Teacher of Midwifery.

THOUGH the act of *parturition* be not a morbid but a natural process, yet it is frequently, in the human female, attended in its progress with difficulty; and sometimes followed, after its completion, with fatality.

The disparity in the degree of danger and difficulty in the same process in woman and in the brute, so much in favour of the latter,

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is not the effect of accident, but is the natural and necessary consequence of difference in form and structure. The erect position, produces also, in great part, the difficulties and dangers of human parturition. From the posture of the body—from the relatively larger size of the infantile head—from the structure and attachment of the placenta, requiring uterine contraction for its separation—from the changes which the abdominal contents and parts sympathizing with them, undergo upon the expulsion of the child and its appendages, a parturient woman is subjected to numerous hazardous incidents which arise during that process. These peculiar dangers are necessarily attached to and arise out of her form, and the specific nature of her condition.

It is true, that, generally, the natural powers do effect those changes during and after labour, which ensure the safety of the woman: but it is equally true, that, occasionally, the efforts of those powers are either suspended, or are so imperfectly exerted, as to leave the latter part of the process incomplete. In such instances, life is placed in a state of extreme hazard, until the necessary changes be completed.

My present intention is not to enter at large into the discussion of this most important subject: I shall therefore confine my observations to the danger every parturient woman has to encounter on the separation of the placenta; and on the sudden removal of pressure on the expulsion of the uterine contents: the latter, especially, is a source of danger, which, in my opinion, has not been sufficiently insisted upon, and practically attended to.

When the contractile efforts of the uterus have expelled the child, the placenta is commonly found lying in the vagina, separated from its uterine attachment, and may be removed, in proper time, without difficulty or danger. There is uniformly, on this separation or removal, a greater or less discharge of blood from those uterine vessels, which did communicate with the placenta, but which is checked by the contraction of the uterus; and in proportion to the degree of contraction, the chance of uterine hæmorrhage is increased or diminished. If, however, after the birth of the child, the placenta be not detached, uterine contractions of a slighter description are shortly resumed, and that mass is at first separated from, and afterwards expelled the uterine cavity. Now, if this natural process should not take place, and an increased discharge of blood ensue, the woman will incur a degree of danger commensurate with the rapidity of the hæmorrhage and the quantity of blood lost; and which danger will exist, till the placenta be ultimately removed, and the uterus firmly contracted.

Under a loss of blood from the uterine vessels, the patient experiences the same symptoms, as under violent or sudden loss of blood from any rupture or division of other blood-vessels. But, as the diameter of the uterine vessels, particularly of those communicating with the placenta, has considerably enlarged during the progress of pregnancy, and still remains much dilated, these vessels pour out their contents with a degree of velocity frequently inconsistent

sistent with the order and course of the circulation: hence occasionally sudden death occurs, even before danger is apprehended.

Under the continuance of uterine hæmorrhage the woman becomes faint, which effect gradually increases with the loss of blood; the pulse is smaller and quicker; probably a state of complete syncope may ensue, during which the action of the heart is temporarily suspended or imperfectly exerted. In this state the hæmorrhage diminishes, or for the time entirely ceases. Yet, sometimes, after these symptoms have continued for a longer or shorter space, the patient becomes restless, sighs deeply and involuntarily, the pulse gradually loses its beat, and at length the circulation entirely ceases. But before the loss of sense, she complains of spasmodic constriction of the stomach, attended with violent pain.

The causes of such rapid and dangerous symptoms are obvious, viz. the depletion of the vascular system by the loss of that blood which is escaping from the uterine vessels. The hæmorrhage too is of a passive kind; the blood is flowing from these vessels, so long as the circulation is going on, for want of a power of collapsing in their extremities, or of diminution of their diameter by the contraction of the uterine parietes.

The usual progress of the symptoms attendant on unrestrained uterine hæmorrhage is nearly similar, whether the loss of blood take place before the removal of the placenta or afterwards. But though the contraction of the uterus be the desirable object in either case, yet some difference in treatment is required.

In hæmorrhage, threatening life before the removal of the placenta, especially if that mass be adherent to the uterine surface, and the natural powers seem inadequate to its separation, manual assistance is demanded. But, when hæmorrhage comes on after the placenta is brought away, such measures are to be had recourse to, and without loss of time, as appear most likely to produce a strong and permanent contraction of the uterus: this, and this alone, will restrain the flooding, and insure the woman's safety. To accomplish this end, pressure with the hand on the uterine tumour, and the external application of cold, must be ranked among the most conducive means.

Under some circumstances of uterine hæmorrhage, the exhibition of stimulants becomes absolutely necessary, to rouse the exhausted powers of vitality. When, for instance, in consequence of a rapid and great depletion, the action of the heart and arteries is nearly suspended, so that the pulse is almost imperceptible, and the woman seems just expiring, the immediate and free use of brandy, or any other stimulant, will usually restore the action of the sanguiferous system, renew those functions which appear nearly destroyed, and prove the means of saving life. But, when those objects are obtained, the further use of such means is not only unnecessary, but injurious.

I have offered these remarks on the effects of uterine hæmorrhage, for the purpose of contrasting the symptoms produced by loss

of blood with those occasioned by another, and by no means an infrequent, cause of death after labour, viz. the removal of pressure from the parietes of the abdomen, and the contents of its cavity, as a consequence of the emptying of the uterus.

A woman sometimes appears safely put to bed after an easy and natural labour; she has suffered no unusual loss of blood on the separation and removal of the placenta; the uterus, on the application of the hand, is found well contracted, and the patient, thus far at least, promises to do well; but notwithstanding these favourable appearances, and perhaps even during the congratulations of her friends upon the termination of her sufferings, she complains of a degree of faintness, not indeed amounting to syncope, but attended with an inexpressible sensation of sinking; this is followed by restlessness, with an anxious depressed countenance, and occasionally by pain and a sense of constriction at the pit of the stomach; expressions of alarm in such words as these, "O! I shall die!" "I am dying!" are frequently repeated; by and bye the restlessness increases, the countenance becomes more dejected and ghastly, the pulse gradually fails in its stroke, the oppressive constriction on the epigastrium becomes intolerable, so as considerably to affect respiration; and, if relief to these symptoms be not speedy, she is shortly a corpse.

Such a termination of a natural process is as unexpected as it is sudden; it consequently strikes the attendants with astonishment and terror, and gives a shock to the feelings of those interested in the welfare of the patient, not to be described.

This unhappy occurrence has happened to women who have had a number of children, and who were moving in a respectable rank of life, in the enjoyment of every domestic comfort, and in possession of every necessary assistance. But I by no means intend to imply, that women who have had a number of children, or those who move in a superior sphere, are exclusively the subjects of this fatal termination of labour. I presume the situation of every lying-in woman renders her somewhat obnoxious to such an attack.

Although the above described case be as dangerous, and the result be as equally fatal as from uterine hæmorrhage, yet it differs in its nature and cause, and requires a distinct mode of treatment. I have before mentioned, that there is an obvious cause for the symptoms under uterine hæmorrhage, whereas in this case it is by no means evident; it can be surmised only, and is rather presumed than proved.

A very melancholy case of this description happened lately in London. A young lady was delivered of a first child after an easy labour; she appeared to go on very well for a short time, when she complained of a violent pain at the pit of the stomach, and soon after expired. A very accurate examination of the body was made, yet no satisfactory cause of death could be discovered.

What rational solution can be offered of such an unexpected and fatal event? and under circumstances too of promised security but a few

a few minutes before it occurred? And, which is of far more importance, what means seem the most likely, on a similar attack, to avert the threatened danger?

It appears to me probable, that on the removal of pressure, by the sudden emptying of the uterus, the parietes of the abdomen and its contents do not readily accommodate themselves to the change thus induced; and, in consequence, some unfavourable impression is made upon the brain and nervous system, and thence transferred to the heart and circulation. An analogous event occasionally occurs after a great surgical operation; by which the system has sustained such a shock, as, under its effects, is incompatible with the continuance of life.

That a woman may die suddenly from the rupture of a vessel in the brain, or in the thoracic or abdominal cavities, during the violent effects of labour, is a conclusion sufficiently natural; but I suspect, in an accident of such rare occurrence, there would be symptoms of pressure on the sensorium in the one instance, and of internal hæmorrhage in the other; and the cause of death, on inspection, would be apparent. Besides, it would be the most likely to happen in lingering or difficult labours; whereas in the case now under consideration it takes place after the most easy, quick, and natural labours, wherein but little resistance to the passage of the child has been experienced, and is unattended with an unusual loss of blood: but our attention is principally excited by that alarming sense of sinking and peculiar and inexpressible anxiety. The progress of this unfortunate case must of necessity be rapid, and its termination sudden: the patient is either soon restored, or quickly lost; so that little time is allowed for reflection, and none for procuring additional assistance. The attack must also occur very soon after delivery; for if the necessary changes are accomplished—if the parts have had time to effect that relative accommodation which the change they have so lately undergone requires,—the woman is safe. Now and then a slight rigor succeeds delivery: though this is no dangerous symptom, yet it seems not improbable that it may be connected with the same cause.

The practical inference I would offer, as leading to a decided and successful mode of treatment of such cases, is this; to endeavour by the immediate and free use of stimulants to keep up the action of the nervous and sanguiferous systems, till the first changes in the circulation be effected, and till a mutual accommodation of the several parts within the abdomen has taken place. With this view, at the commencement of faintness *without loss of blood*, I would have recourse to the exhibition of brandy, or other spirit, undiluted or diluted according to the urgency of the symptoms and the rapidity of their progress, and in such quantity as may seem necessary to answer the intended purpose. That purpose being attained, and the patient relieved, further use of stimulants may do harm. The medicated stimuli, as æther, volatile spirit, cordial tinctures, &c. may of course be used with advantage. Moderate pressure upon

the abdomen with the hand, or a bandage applied round the body, will assist the general intention; and the patient ought, on no consideration, to be allowed to raise herself from the recumbent posture, till she be so far recovered as to warrant security from the recurrence of the symptoms of alarm and danger.—*Apoth. Rep.*

CRITICAL ANALYSIS

OF RECENT PUBLICATIONS

IN THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

A Treatise on the Hereditary Properties of Diseases; containing Remarks on the unfounded Terrors and ill-judged Cautions consequent on such Opinions: with Notes, illustrative of the Subject, particularly in Scrofula and Madness. By Joseph Adams, M.D. F.L.S. Physician to the Small-pox Hospital, &c. 8vo. boards. 5s. 6d.

HEREDITARY diseases are a fruitful source of terror to the patient, and of inquiry to the physician. One should therefore have expected that before this time the subject would have been generally understood, or at least accurately canvassed. Yet, if we may believe our author, no systematic inquiry on the subject has been instituted from the days of Mercatus, who wrote at the beginning of the seventeenth century, till our own times, a period of nearly two hundred years. When the Memoirs of the French National Institute presented us with M. Portal's paper,* on account of the celebrity of the author, as well as the novelty of the inquiry, we thought it right to make our readers acquainted with that essay; and, if its appearance has given rise to the present performance, we shall think our time and labour amply repaid.

The work commences with a distinction between hereditary ard family diseases; the former are such as are transmitted from parents to their offspring, the latter such as appear in more than one of the offspring of parents free from such complaints. These distinctions are carefully kept in view throughout, and by attending to them an inference is

* For a translation of M. Portal's paper, extracted from the French National Institute, see Med. and Phys. Journal, vol. xxxi. p. 229, and 281.

drawn

drawn, that connate diseases or privations of senses are rarely, if ever, hereditary, but often appear among brothers and sisters, the offspring of parents free from such inconveniences.

The different periods of life at which such diseases show themselves, forms the next division; and on these the prognosis of the access, and even cure of such complaints, are made very much to depend. As the deductions are drawn from a great number of observations, collected with much industry, we shall not offer any opinion upon them, but in our short analysis at once introduce our readers to the last and most important part of the inquiry, namely, "what provision is made by Nature to correct the influence of such hereditary causes, and how far they can be imitated and improved by art?" These provisions are pointed out in the influence produced by climate, in the result of customs during the less cultivated state of society, and also in the progress of refinement; and lastly, in the positive laws, human and divine, which seem to have had such a provision in view. That these provisions are sufficient, in almost every case, is shown by the present state of mankind, and by the necessary consequence that would have followed the want of them. This is most strikingly illustrated in a single instance, in which none of these could avail, because the cause would be constantly operating; and here a special provision is made by an effect of the disease itself, which entirely supersedes propagation from such sources.

"But should there exist a disease, (says our author,) the disposition to which is excited by climate; should such a disposition become hereditary, and should the disease when excited prove incurable, from such a combination of causes we could expect nothing less, than the gradual extinction of the race; and should the district be repeopled, the same succession of causes and effects must gradually extinguish the descendants of the new Colonists; yet, such a disease does exist in the finest and most extensive part of the habitable globe. Human institutions have indeed made some feeble attempt at restraining it, but human endeavours must have proved ineffectual. Happily, the same power which permitted such a cause, has fixed limits to its effects.

"The *Elephantiasis* of Aretæus is peculiar to warm climates; the disposition to the disease is hereditary, and the disease itself has, hitherto, proved incurable. I have never been able to learn, that it has attacked emigrants from a colder climate, nor their immediate descendants. A residence therefore of some generations, is probably necessary to induce the disposition. When this diseased disposition is *derived* from *inheritance*, the action always commences before the age of puberty; and the subject never arrives at that state; the organs are never evolved, and no other marks of virility appear. When

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the disease originates with an individual, it usually commences at a more advanced age; but from that time, the organs which distinguish the sexes decay, and become gradually unfit for their original purposes. The fact of a disease, which arrests the progress to virility of every youth, and emasculates every adult whom it attacks, is so surprising, that after having witnessed it myself, I should have been backward in publishing the result of my observations, had not others been present at every examination; and I should have been unwilling to draw inferences from them, had not subsequent writers confirmed my account.*

"Thus an hereditary disposition to an irregularity of the most formidable nature, which being excited by climate, must have progressively increased in spite of all human institutions, is arrested as soon as it occurs, by those very actions which form a part of the deviation from the usual progress of Nature."

Such is the short analysis our limits will afford of this interesting work. A great number of notes are added, which may be said to form distinct essays. We shall particularly notice one as connected with that peculiar property of Elephantiasis, to which our extract refers. The author seems fearful lest a passage in Dr. Bateman's Synopsis should seem to invalidate his testimony on a fact to which he attaches so important a final intention. Without entering into the controversy we shall briefly state its outlines. Aretæus is the first writer from whom we can collect any accurate description of Elephantiasis. Among the symptoms, he mentions *libido inexplebilis*, in which he has been followed or at least uncontradicted by every subsequent author till Dr. Adams. We need not say how much the symptom described by him is at variance with the salacious temper imputed to these unhappy objects, nor need we enter into any speculations on its existence after the notice given in our former Number of the case now in St. Bartholomew's Hospital, which any of our readers may examine.

The passage concerning the Itch, its true diagnosis, and the various eruptions confounded under the same name, is not the least interesting, nor by any means the least important part of the work; whether we consider the frequency of the disease, or how little it is understood by those whose practice is confined to the higher ranks. It also gives Dr. Adams an opportunity of descanting on one part of the study of medicine, the influence of which is become so extensive,

* "See Edinburgh Medical Journal, vol. v. p. 500, Note.—Gentleman's Magazine, vol. lxxxi. July to December, 1811, p. 145, second column;—and Dr. Gourlay's History of Madeira."

that,

that, if ill directed, it must prove highly injurious to mankind, in a science so necessary to its comfort as the treatment of disease; for it cannot be necessary to add, that the slightest misnomer may introduce a fatal error into practice. If we understand our author, this is the object he has in view in objecting to the word TYPHUS, which he seems to hint has been the source of an error in the army practice, which is now pretty generally admitted. The passage is so pointed that we shall make no apology for transcribing it.

"These remarks on names, somewhat abruptly introduced, may serve to show how careful we should be in changing commonly-received terms. Whether we use psora or scabies for itch, may seem of little consequence, as it is not certain that those from whom we derive the words were acquainted with the disease to which we now apply them. But whenever a name is changed, some regard should be paid to etymology, as the great use of nosology is, that we should all be acquainted with each other's language. If we expect more than this, there will be great danger of misleading ourselves. The first person who proposed an arrangement of diseases, similar to what is made of plants, was Sydenham. He, however, rather looked to it with a wish than an expectation of its accomplishment, and seems not aware that the arrangements of botanists were, in many instances, artificial. It is certain, that he lived to lament the application of practice to names, declaring, in the most advanced period of his practice, that 'the invention of the term, or opinion of malignity, had been far more destructive to mankind than the invention of gunpowder.' I leave it to the decision of those who have had most experience, in the comparative effects of disease and gunpowder, how far the introduction of the term Typhus may be liable to a similar charge. We may at least remark, that the very fever which drew this expression from Sydenham, is, by Dr. Cullen, included among the Synonyma of Typhus.* As the illustrious Professor refers to every original author, it would be unreasonable to accuse *him*, if such sources of information are not studied by his readers; and if he made his Nosology a text-book for his lectures, we cannot doubt that his hearers were often apprised, that the same mode of practice could not be applicable to fevers arising from so many causes, assuming so many forms, appearing in such different climates, and under habits of life so different as to comprehend near fifty synonyms. Still, we may lament the influence of a term, in a work which, from the just celebrity of the writer, and its connection with the 'First Lines,' may hereafter become the text-book of less enlightened lecturers, as it is already of physical compendiums.

"Diseases of the skin being more immediately the objects of our senses, may be thought more easily reducible to orders and genera. Let us try this in Itch and Syphilis; because, in these we are most frequently required to give a decided opinion. Of the first, if

* "Febris nova anni, 1685, Syden. Scedul. Monitoria.

enough

enough has not been said, to show the difficulty which attends such an attempt, we may add from the Synopsis, that 'from its affinity with three orders of eruptive appearances, pustules, vesicles, and papulæ, it *almost* bids defiance to an artificial classification.' The above orders, comprehending only fifteen genera with their species and varieties, may be less alarming to a modest enquirer. But the eruptions of Syphilis are said to 'bid defiance to arrangement, according to external character;' that, 'in fact, they possess no common or exclusive marks, by which their nature and origin are indicated;' and that 'there is no order of cutaneous appearances, and scarcely any genus or species of chronic eruption *already described*, [and this is the last,] which these secondary symptoms of Syphilis do not occasionally imitate.'—'Nevertheless,' continues Dr. Bateman, 'there is in many, a difference which a practised eye will recognize between the ordinary diseases of the skin and the syphilitic eruptions to which the same *generic appellation* might be given; this is often observable in the shade of colour, in the situation occupied by the eruption, in the mode of its distribution, and in the general complexion of the patient. Hence, to a person conversant with those ordinary diseases, a degree of anomaly, in these respects, will immediately excite a suspicion, which will lead him to investigate the history of the progress of such an eruption, and of its concomitant symptoms. And it will frequently happen, that the most experienced observer can only arrive at a satisfactory conclusion, by comparing the cutaneous appearances with these concurring symptoms, and with the previous history of the disease.' [Synopsis, p. 328.] Fortunate are those tyros and practitioners who are within the reach of consulting a person conversant with those ordinary diseases, as the discriminating marks between half a score such and syphilis, can afford little assistance to the common reader.

"This Note may seem extended to an unreasonable length, and no longer connected with hereditary diseases. But it is most intimately connected with whatever relates to medicine as a science. For if two not uncommon diseases, the progress of which is slow enough to admit the most accurate observation, are reduceable to no laws, or to none that can be described, it is evident that our present mode of investigation must be defective, or that we must give up every prospect of progressive improvement. We are told, from very high authority, that the faculty of tracing actions, so as to discover a law, makes the whole of philosophy.* In medicine this must be more difficult, and more as well as closer observations must be necessary, than in any other branch of natural knowledge; because diseases are modified by constitutions, and their progress interrupted by remedies. Hence, it is not easy to bring men to a general agreement; yet, some progress has been made towards such an event. In the Small-pox, Sydenham has taught us to look for certain laws, which were never established till his time.† In gout, he has not been less successful; and the instructions he has given in tracing fevers,

"* Nov. Organ." "† See Mead's Discourse, chap. 2."

have

have become almost oracular. Fothergill has been scarcely less successful in Scarlatina. Though in the treatment of these diseases, improvements may be expected, and changes necessary under different circumstances, yet the phenomena of the diseases themselves, as marked by those writers, are now so familiar to us all, as to admit of no dispute. If this can be accomplished in fevers, shall we despair of arriving at the same certainty in diseases, whose progress is slower? It must be admitted, that for so desirable an event, we require the same talent at observation, the same persevering diligence, with the same integrity as existed in the man who, after establishing such laws, should declare that there are small-pox cases, which the errors of a nurse could not render fatal; and others, which the skill of no physician could cure. When, therefore, we possess the fruits of such men's labours, let us learn how to value them.

"Having made these general remarks, I shall trace very shortly the progress of Mr. Hunter's inquiries, in a disease which is said 'to possess no common or exclusive marks.'"

Dr. Adams proceeds to trace the very confused history given of venereal complaints before Mr. Hunter's time, and the greater accuracy which his discrimination has introduced. This he proves in a most striking manner by the controversy which at one time existed as to the importation of that disease into Otaheite, two nations mutually accusing each other as the authors of an event which there is reason to believe never existed. We should dwell longer on this and several other passages, were it not that from what we have already produced, and from the well-known character of the author, we cannot doubt that the work will be in the possession of most of our readers.

Medico-Chirurgical Transactions, published by the Medical and Chirurgical Society of London. Volume the Fourth. 8vo. pp. 490.—Longman and Co. 1813

(Continued from p. 74.)

XIII. *History of a Case of Premature Puberty.* Communicated by ASTLEY COOPER, Esq. F.R.S.

THESE rare instances of precarious developement of sexual organs and preternatural growth, are curious, though at present we are content with noticing them, without attempting to account for their existence.

"Charlotte Mawer, the daughter of a waterman at Lincoln, aged about four years and a half, had an appearance of the catamenia about a year and a half since, and again in the course of four or five months; but for the last two or three periods, nearly at the end of five weeks. The discharge exactly resembled that of most women, except that it was of rather a darker colour. The last period was about the 5th of March, 1813, when the girl looked pale, and seemed

to have a degree of lassitude about her. The breasts are very full, and as large as most young women's of twenty years of age. She is very broad over her chest and loins. Her pelvis seems much larger than is ever observed at her age. The pubes is covered with a white-coloured hair, which began to shew itself when she had the first appearance of the catamenia. She is quite a little woman in her appearance, except as to her countenance, which is childish. She is much bigger than a sister who is two years older. She plays with children of her own age, and does not seem to have any sexual feelings, or an uncommon degree of modesty. That there might be no mistake with respect to her age, the register of the parish where she was baptised was examined, which specified her being born on the 22d of March, 1806.

"Since the above account of the case of Charlotte Mawer was taken, she has continued to menstruate regularly; but there is now only a space of three weeks between each period. The discharge is as copious as in most women, and it generally continues about four days; it is the colour of venous blood, and does not coagulate. She is frequently affected with the leucorrhœa in the intervals; the hair has begun to grow in the axillæ; her countenance has not near so much the childish appearance; her voice is much rougher; she has a degree of modesty not formerly noticed, and does not now like to walk in the streets, because some boys have teazed her about her appearance. She is four feet and an inch high, is broader across the pelvis than the shoulders, measuring only fourteen inches and three-quarters from one acromion scapulæ to the other, but seventeen inches from the anterior superior spinous process of one ilium to that of the other.

"Her eldest sister, aged about seventeen years, has never menstruated, and there is very little fullness in her breasts, though she is in good health. One of her sisters, aged ten years and five months, is four feet and two inches high, and is not so broad across her pelvis as her shoulders; she measures fourteen inches and a half from one acromion scapulæ to the other, and thirteen inches from the anterior superior spinous process of one ilium to that of the other."

A somewhat similar instance in a girl, is recorded in the 17th volume of this Journal, p. 522; and an ingenious paper on the subject, is inserted in our 10th volume.

XIV. *Case of Contracted Wrist, successfully treated.* By Mr. Hodgson, Surgeon, at Lewes.

The subject of this case was a lady aged twenty years, in whom "the carpal bones were so completely dislocated, that their posterior part, with the ends of the radius and ulnæ, represented the anterior part of a stump: the fingers were strongly clenched into the palm of the hand, with the knuckles resting upon the inside of the fore-arm, opposite the flexor tendons." The origin of this affection was attributed to convulsion fits. Mr. Hodgson succeeded in restoring the

the parts to their natural condition by the following means. Having immersed the hand in warm water, he succeeded in getting the little finger sufficiently out to admit of a small bolster of wool wrapped in linen. This was allowed to remain within the grasp of the finger: the other fingers were successively treated in a similar manner, the size of the bolster being gradually increased. At the same time Mr. H. endeavoured to bring the hand back; "but (he observes) the rigidity of the wrist was so great, that had not my patient possessed an uncommon share of courage, she must have been disheartened from any further attempt. By the use, however, of warm water, and embrocating the parts with oil, it gradually gave way, in the course of about ten weeks, to a moderate degree of force applied by my hand daily." The author derived advantage from an apparatus which he contrived of a spring made of iron, which projected from the back part of the wrist over the back of the hand. To this a piece of soft leather, passed round the inside of the fingers and palm of the hand, was fixed, and thus the hand was effectually kept in its situation.

XV. *History and Dissection of a fatal Case of Cynanche Laryngea.* By EDWARD PERCIVAL, M.D. Dublin.

This case is so highly interesting, both from the style in which it is narrated, the peculiar circumstances which attended it, its termination, and the scope which it affords for reflection, that we shall present it to our readers as communicated by the learned author.

"The following recital of a case of cynanche laryngea, whose fatal event has lately deprived the world of an eminent character, is transcribed from notes taken daily during my personal attendance upon him, in conjunction with another physician and two surgeons.

"X. Y., aged 63, of spare, though muscular habit, and somewhat delicate health, was attacked with apparently slight catarrh and sore throat, in consequence of a hasty and fatiguing journey. On Tuesday, May the 4th, 1813, he consulted an eminent physician of this city, who advised purgative and sudorific remedies, under which treatment the symptoms appeared wholly to subside. Having imprudently ridden out, and exposed himself to a cold east wind, the catarrhal affection recurred on Friday the 7th, when he was directed to be bled to the amount of 16 ounces, to take a pill of calomel and cathartic extract, and a draught with nitre. He rested perfectly well this night, and appeared nearly in his usual health on the following morning. His tongue was clean, his pulse between 70 and 80 strokes in the minute; and he took an airing in his carriage in the course of the day. On the following morning (Monday) he again manifested catarrhal symptoms, with sore throat, and hoarseness. He

was now directed to take James's powder to some extent, which induced profuse perspiration, with great relief of all the urgent symptoms. Before the sweating had subsided, on Tuesday morning, he injudiciously rose from his bed, and occupied himself during the day, by dictating aloud to some attornies in his chamber. In the evening, his respiration became much impeded, and his voice extremely hoarse; which alarmed him by the resemblance of the present attack, to one which he experienced in London, eleven years before. On that occasion, he was bled copiously and repeatedly, and narrowly preserved his life. The patient himself, and several of his friends, affirmed the disorder to be the same as the present, and confined to the upper parts of the windpipe. It may be proper to observe, that his father suffered a severe attack of this kind many years ago.

"On Wednesday morning, I saw him for the first time, in conjunction with another physician and a surgeon. His countenance was then pale and anxious; his eyes protruding; his tongue foul and much swelled; his respiration slow and laborious, with a shrill or stridulous sound, as of air forcibly passing through a narrow orifice; and his voice indistinctly audible, in the tone of a hoarse whisper. He had a perpetual inclination to expectorate; but all his efforts to this purpose were fruitless, which added much to his distress, by the continual apprehension of suffocation. He was perfectly unable to swallow any substance, whether fluid or solid, as the smallest portions of either were instantly rejected with violent coughing. The visible internal fauces were of natural appearance and pale colour. He informed us that he had experienced some shooting pains about the larynx, which were now entirely subsided. The epiglottis was swollen or distended, and somewhat erect; which accounted for the coughing and sense of suffocation on attempting to swallow any-thing, as this organ had ceased to act as a valve upon the larynx. His pulse was full, throbbing, and very frequent.

"Twenty ounces of blood were withdrawn from his arm by a large orifice, which afforded some immediate relief to his respiration, and his general feelings of distress. He now thought he was able to swallow, but, on attempting it with a tea-spoonful of water, the fluid was rejected with a fit of coughing, or rather of suffocation, which nearly extinguished life.

"Sixteen leeches were now applied to his throat, and two purgative enemata were administered, which brought away no fæces.

"In the afternoon, his urgent symptoms appeared to be stationary, twelve ounces of blood were taken from his arm, and a dozen leeches applied to his throat.

"At nine o'clock, p. m. his pulse was softer and less frequent, but his tongue was still swelled and dry, his breathing not amended, and the stridulous sound unabated. Bronchotomy was now determined upon; and the operation was performed without delay, by a vertical division of the integuments covering the interval between the cricoid and thyroid cartilages; the tracheal membrane was pierced laterally, and a canula was inserted, whose diameter was somewhat less than half an inch. The loss of blood by this operation might be

about

about six ounces; some part of which escaped into the trachea, and was returned through the aperture with much gurgling noise. He likewise expectorated a small quantity of mucus. In about half an hour, he breathed with perfect facility, and fully inflated his lungs, which was hailed as a favourable circumstance. He slept at intervals during the night, for the space of three hours; and towards the morning, he swallowed four dessert spoonfuls of milk, with some caution and address.

" At half past ten o'clock, a. m. (Thursday) his pulse was frequent but tranquil, his animal spirits lively, and he wrote much with a pencil upon paper, concerning various matters. He spoke with effort, and the tone of his voice was still that of a hoarse whisper. Two or three purgative injections brought away a trifling quantity of faecal matter. At noon, he made a fruitless attempt to swallow. A nutritive injection of milk, and another of broth, were administered in the course of the afternoon and evening. Eight leeches also were applied to his throat. During the night, his pulse became more frequent, and he continued, though restless, to lie on his back only when recumbent. By great, and repeated efforts, he expectorated a piece of hardened mucus besmeared with blood. About two o'clock in the morning, his breathing became greatly embarrassed, his extremities grew cold, and he appeared to be on the point of death. Twelve ounces of blood were withdrawn from his arm; the canula was cleansed and replaced (an operation which was always repeated at short intervals) when to the agreeable surprise of his attendants, his respiration became more easy, the warmth returned to his extremities, his pulse revived, and shortly afterwards his animal spirits and cheerfulness returned. He swallowed a pint of liquid nourishment, at intervals, with tolerable facility; and he repeatedly expectorated pieces of hardened mucus besmeared with blood.

" At ten o'clock, a. m. on this day (Friday) he appeared refreshed and amended in all respects. Purgative and nutritive enemata were administered during the day alternately. He swallowed also small portions of broth and jelly repeatedly. In the evening, his pulse was soft and tranquil, though still frequent. His supine posture was, for the first time, changed to lying on his right side. His powers of deglutition were considerably improved, and the tone of his voice greatly amended. He had passed faeces and urine. His tongue, which had hitherto been swollen and hard, was now reduced to little more than the natural size, and was soft and moist; his countenance also was much improved; but he continued to breathe only through the canula. He passed the early part of this night tranquilly, until two or three o'clock in the morning, when his fever increased (similarly to the exacerbation of the preceding night), his breathing became laborious, and he evinced much irritability and despondency of mind. This febrile paroxysm continued for several hours.

" At noon on Saturday, his symptoms again wore a favourable appearance. His countenance was natural; his pulse, though frequent, was regular and firm; his tongue was reduced to its natural size and appearance; his powers of deglutition were perfectly restored; and the tone of his voice approached to a low key of the natural sound. He had passed copious evacuations, by a solution of Rochelle salt in chicken-

chicken-broth. The canula had been removed from the trachea for some hours; and as he breathed with perfect facility through the natural organs, it was not afterwards inserted into the aperture.

"The evening, and early part of this night, were passed with tranquillity and some sleep. About sunrise, however, he began to shew much impatience, irritability, and alarm. Yet he swallowed, at six o'clock, a. m. on Sunday morning, six or seven spoonfuls of oatmeal porridge, with milk, at his own particular request. About two hours afterwards, his mind appeared to be much disturbed; his pulse became more frequent and feeble; delirium, and at length stupor supervened, and he sunk rapidly until six o'clock in the afternoon, when he died without a struggle.

"At three o'clock on the following day, one of the surgeons who had been in attendance, (and who is a skilful professor of anatomy in this city,) opened the thorax and examined the larynx in my presence. The following is an account of the appearances dictated at the time of the dissection.

"On opening the thorax, the cartilages of the ribs proved to be ossified. The left side of the mediastinum, and the surface of the lung contiguous to it, appeared quite dry, as though the parts had been long exposed to air. A similar appearance, though in a less remarkable degree, manifested itself on the right side. The lungs were perfectly sound and natural, excepting a slight adhesion of the right lung to the costal pleura. Somewhat more than half an ounce of aqua pericardii was discovered; the heart itself was perfectly natural.

"The membrane common to the larynx and œsophagus, was very much thickened. The epiglottis was perfectly natural; but from the sides of this, to the arytenoid cartilages, the parts were morbidly thickened, increasing in density, as they approached the cricoid cartilage. The orifice of the rima glottidis was somewhat diminished, but exhibited no appearances of unusual vascularity. On dividing the membranes in the posterior part of the trachea, its internal surface appeared coated with thin pus, which continued to shew itself to the base of the cricoid cartilage, and between the membrane common to the œsophagus and larynx, and the posterior surface of the cricoid cartilage. Passing a probe into this part, it was discovered that between this membrane and the muscles of the larynx, even to the points of the arytenoid cartilages, was formed one extensive abscess.

"The upper edge of the cricoid cartilage was ossified, and found bare and rough by loss of surface as from exfoliation. The right arytenoid cartilage was dislocated, and when moved on the cricoid, gave the sensation of two bones, stripped of their articulating cartilage, rubbing together.

"Tracing the course of the abscess just mentioned, along the right side of the larynx, it was found to extend between the cricoid and thyroid cartilages, until it reached nearly to the edge of the artificial opening made during life, without however communicating with it in any part.

"*Remarks.*—On reviewing the history of the preceding case, the first

first circumstance of remark is the unexpected suddenness and violence of the morbid affection of the larynx; an affection which has been so ably and discriminately defined by Dr. Farre, in his valuable communications to the Society, that I shall not here enlarge on its diagnostic character.

" In the foregoing case, during the course of twelve hours from the first attack (on Tuesday evening) the disease was fully formed. The swelling and erection of the epiglottis; the slow, difficult, and stridulous respiration; without any pain or oppression of the lungs, or the slightest erubescence of the visible internal fauces; the exasperated pulse, and perfect inability of deglutition, marked the disease as cynanche laryngea.

" The copious depletion of blood, already detailed, to the amount of 66 ounces, (which was uniformly buffed and closely cupped,) together with the extravasation of 36 leeches, reduced the general fever, without affording any corresponding local relief. It was, at that juncture, a question whether bronchotomy should be resorted to; and the measure was decided upon, from a consideration of the age and delicate constitution of the patient; and from a persuasion, that time only could reduce the inflammatory tumefaction of the diseased parts. Meanwhile it became essential to facilitate the function of respiration; and to relieve the bowels, and supply nutriment by the rectum. But the nocturnal exacerbations of fever, (unattended however by any observable rigors,) greatly discouraged the hope of final relief.

" On dissection, these phænomena appeared to be accounted for, by the abscess established, and the continual formation of fresh purulent matter.

" It was very evident, both from the symptoms during life, and from the appearances on dissection, that the inflammatory stage of the disorder had entirely subsided some time previous to the dissolution of the patient. So entirely, in truth, had the urgent symptoms ceased, that, twenty-four hours before his death, his medical attendants had formed better hopes of the event of his disorder, than they had ventured to indulge at any preceding period. Respiration and deglutition were restored to their natural facility; the fever, though not subdued, had considerably abated; and the animal spirits, and countenance of the patient, were such as to encourage the hope of ultimate recovery. In the course of the following night and morning, the febrile exacerbation recurred with more violence and more alarming symptoms than ever; delirium, stupor, and at length death supervened, by the process common to febrile exhaustion.

" I have already stated, that the patient had a severe attack of a similar, and not improbably of the same disorder, eleven years ago. Sir Gilbert Blane has obligingly informed me, that ' he was called to a medical attendance on the subject of this case, in London, in February 1802, when the patient, after labouring under catarrh for ten days, was seized with fits of strangulation, which continued, at intervals, for a week, during which period he was thrice bled. The blood was buffy, but not cupped, on the two first occasions; on the third, the buff was absent, and the complaint then assumed a form, so purely

spasmodic, that opium and assafœtida were given with evident relief.' I have since been informed, that twenty years ago, whilst he was on a journey in Ireland, he was similarly affected, in so severe a degree, that medical aid was summoned from Dublin on the occasion; and that a long time elapsed before he recovered from the severity of the disorder.

"On the late occasion, the unfortunate resolution which he took, of rising from his bed during profuse perspiration, (excited by doses of James's powder,) and of occupying many hours in dictating aloud, conspired at once to expose him to a chill over the surface of his body, and to excite preternatural irritation in the larynx. The predisposition to the specific disorder of cynanche laryngea was not only hereditary, but clearly marked in the individual constitution.

"From the foregoing recital, I think, may be inferred, the expediency of resorting early to the operation of bronchotomy, before the lungs are thrown into a disordered condition; and before the general powers of life are exhausted by the laborious and imperfect exertion of this vital organ. Had not the secret abscess been formed, in the case before us, the general fever would, in all probability, have subsided with the decline of the local inflammation; whilst the intervening restoration of the powers of breathing and deglutition might have been effectual in preserving the life of the patient."

XVI. *Case of Extravasation of Bile into the Cavity of the Abdomen, from Rupture of the Liver or Gall Bladder.* By Mr. FRYER, Surgeon, of Stamford.

This is an extraordinary case, and the patient appears to have had a narrow escape. The subject of it, a boy aged thirteen, received a violent blow from one of the shafts of a cart, on the region of the liver, which was succeeded by pain, and frequent vomiting of bilious matter. He complained of great sinking, and coldness of the extremities, and his pulse was weak, small, and fluttering. A surgeon was sent for, who ordered the abdomen to be fomented; and, as the patient's stomach rejected every thing, he directed purging clysters to be occasionally thrown up. On the third day, symptoms of inflammation coming on, Mr. Cooper, who we believe was Mr. Fryer's partner, was requested to see the child, whom he found then "labouring under considerable pain about the region of the liver; there was great tension of the abdomen, which was extremely sore to the touch, and his vomiting continued as frequent as at first, his stomach rejecting both food and medicine. The pulse was very quick, small, and weak; the skin hot and dry; the tongue much furred; the urine high-coloured; and he complained of some difficulty of breathing, and of great thirst." It is very obvious that with such symptoms, after an accident of the nature above described, the delay of a very few hours more would have rendered the only remedy which occurred

to

to us on reading the case, likely to afford relief, ineffectual. We hardly need mention bleeding, which Mr. Cooper ordered to the extent of *eight ounces*. The fomentations were continued, and a few grains of calomel were ordered to be given every hour till proper evacuations, which the glysters had failed in bringing down, should be obtained. Afterwards the effervescing mixture, with ten drops of laudanum, every four hours. The following day he was much better, having had some motions; but his sickness still continuing, he was ordered one grain of opium every four hours. Mr. Cooper saw him again in eight days: the day preceding his visit, the boy had complained of great increase of pain, accompanied by vomiting, which was somewhat relieved by a blister. Mr. C. found him completely jaundiced: his stools were white; the swelling and tension of the abdomen were much diminished, and the sickness and thirst abated. The same treatment was continued. Two days afterwards the swelling of the abdomen was increased, and a fluctuation perceptible. In eight days more (twenty-one from the accident) the abdomen was considerably distended with fluid. The patient did not complain of much pain, had the facies Hippocratica, and appeared to be sinking fast. He was now tapped, and thirteen pints of what appeared to be *pure bile* were evacuated. He bore the operation well, but did not seem to derive much benefit from it. The operation was repeated in twelve days, and fifteen pints of a similar fluid were drawn off. "He bore the tapping better than before, experienced great relief, and, though he was still much reduced, was evidently better. In nine days more, the tapping was repeated, and thirteen pints of a similar hue evacuated with like advantage." The operation was once more performed after an interval of about nineteen days, when only six pints were drawn off. "A purging had come on about a week before. His stools were of a natural colour; he was much improved in his looks, and his appetite and spirits were good." He continued gaining health and strength, and is now a stout young man.

XVIII. *Some Observations on the Use of Opium in Uterine Hæmorrhagy.* By Mr. STEWART, Lecturer on Midwifery, &c.

The author has detailed two cases to illustrate the utility of opium in uterine hæmorrhage. In the first, in which the patient was reduced almost to extremity, in consequence of a month's flooding, the discharge of blood averaging a pint daily, he gave, at seven o'clock, eighty drops of laudanum:

this producing no sensible effect in twenty minutes, one hundred and twenty drops more were given, which in ten minutes was followed by drowsiness, and a remission of the vomiting and tremors.

"At eight o'clock (Mr. Stewart continues) the hand was introduced into the vagina, the os uteri gradually dilated, the placenta detached at one side, the membranes ruptured, and, the hand being carried forward, the child's feet were grasped, and brought into the vagina; the vomiting and restlessness again recurring, eighty drops of laudanum were given, which produced composure and a permanent cessation of the vomiting.

"The fœtus, which appeared to be of the seventh month, was easily extracted.

"The hand was introduced immediately afterwards, and the uterus instantly contracted, separating the placenta, and forcing it into the vagina, from whence it was gradually extracted.

"At nine o'clock fifty drops of laudanum were given, and at short intervals she took some gruel and brandy.

"At ten o'clock I left her, having ordered a draught containing sixty drops of laudanum, to be given at two o'clock next morning.

"At nine o'clock the following morning, I found she had taken her medicine, had slept two hours, and said she had no complaint; her pulse, which was one hundred and thirty, was very weak, and intermitted.

"I ordered her to take fifty drops of laudanum, some beef tea at very short intervals, and occasionally some gruel and brandy.

"In the evening she was doing well, and her pulse was the same as in the morning. She took sixty drops of laudanum at bed-time.

"The next day in the morning her pulse was one hundred and twenty, weak and intermitting; she had passed a comfortable night, and felt in every respect easy. She was ordered forty drops of laudanum, and the beef tea, brandy, and gruel, were continued. At night I found her the same as in the morning, and ordered her fifty drops of laudanum at bed-time.

"On the following day her pulse was diminished in frequency, was stronger and more regular, and she said she had passed a good night.

"As she had no stool for four days, she was ordered an ounce of castor-oil, which operated in the evening; the beef-tea was continued, and she took thirty drops of laudanum at bed-time.

"The two succeeding nights she took thirty drops of laudanum.

"From this period she rapidly advanced to a state of convalescence without the occurrence of one untoward symptom; and in fourteen days from the time I first saw her, she was able to engage in the management of her family."

In the second case, the patient swallowed one ounce of laudanum between the hours of eleven in the morning and seven in the evening of the same day; and continued to take very

very large doses of it afterwards, with, it appears from the statements before us, beneficial effects.

The author recommends the following rules to be observed where it is thought expedient to administer opium in uterine hæmorrhage:

"First. Opium ought not to be exhibited, till we have determined that the natural efforts are insufficient to expel the child.

"Secondly. When we have determined upon delivering the patient by turning the child, a large opiate, not less than eighty drops of the tincture, or four grains of solid opium, ought always to be given; and, if the circumstances of the case will permit, we should wait twenty minutes if the tincture, or half an hour if the solid opium is given, before the hand is introduced.

"Thirdly. As often as symptoms of general irritability, or great debility supervene, the opiate ought to be repeated, and the dose increased according to the urgency of the symptoms.

"Fourthly. If the general system has suffered severely from the effects of the hæmorrhagy, the opiate must not be diminished in quantity, or suddenly remitted, although symptoms of irritability be not present."

XIX. *Observations on the Vascular Appearance in the Human Stomach, which is frequently mistaken for Inflammation of that Organ.* By JOHN YELLOLY, M.D. Physician to the London Hospital.

Some important facts are stated in this essay, the whole of which merits the deepest attention from practitioners; but our limits forbid our entering at present upon the subjects which Dr. Yelloly has treated with considerable labour and great ability.

(To be continued.)

Des Maladies de la Vessie et du Méat Urinaire, chez les Personnes avancées en Age. Par M. NAUCHE, &c. &c.

IN a former Number* we took notice of this Treatise on the Diseases of the Bladder, which we were then prevented from completing, but, as the subject is very important, we will now resume the analysis.

Varicose Veins in the Urethra or Bladder.—This cause of impediment to the passage of the urine, although noticed by authors, is not usually referred to by surgeons in their practice. We think, however, that it more frequently produces hæmaturia, than retention of urine, or any other symptom. Our author refers us to several writers for an ac-

* February last.

count of the complaint, but, on turning to Morgagni, we find he rather quotes the Sepulchretum Anatomicum, than speaks from his own anatomical observation. But there is no doubt that the veins in the vicinity of the prostate gland will enlarge and burst in many cases where that gland is diseased, and a considerable hæmorrhage is often the consequence, which it is very difficult to restrain, and being a consequence of the diseased state of the gland, can as little be cured as the disease itself. M. Nauche remarks, that the inhabitants of warm climates are peculiarly subject to this affection—"qui ont abusé d'elles-memes, des plaisirs veneriens et des boissons spirituenses."

The means of cure pointed out are few and inadequate, but they are as good as the case will admit of. It is impossible to destroy the varices. Rest, the horizontal position, aperients, diluent liquors, and the application of leeches, are the principal remedies which are directed. The bougie or catheter should not be used without absolute occasion, although, when there is retention of urine, M. Nauche says, the elastic catheter may be retained a month or six weeks in the bladder, to repress the enlarged veins, which advice we believe he will hardly get many of his patients to pursue.

Fungous Excrescences of the Bladder, and Caruncles in the Urethra.—These tumours may arise in any part of the bladder. They are of the size of an olive or larger, sometimes firm and tuberculated, at other times soft and sanguineous, adhering to the bladder. They produce difficulty and frequency, or sometimes retention, of urine, and all the common symptoms of stone, for which disease it is not unfrequently taken; and even the sound will often lead an inexperienced surgeon to suspect the existence of a calculus, so delusive is the perception communicated by it. The disease is rare in young people, but not unfrequent in those of advanced age.

The excrescence in the urethra called caruncle, has met with the fate of almost every subject in medicine or surgery. It has been considered as the most frequent cause of urinary complaints, and gave rise to all the quackery of medicated bougies; and it has afterwards been denied ever to take place in any instance. The truth seems to be equally removed from each of these conclusions. The analogy which exists between the membrane of the urethra and those of the nostrils, vagina, &c. is sufficient to evince the possibility of these excrescences on the former membrane, while the testimony of credible authors, and the still more positive

evidence of preparations, show that it is far from being an uncommon occurrence. In the treatment, nothing peculiar is recommended by the author distinct from the treatment of stricture of the urethra.

Cancer of the Bladder or Urethra.—The author observes that the bladder is seldom originally the seat of cancer, the disease being communicated from the uterus or the rectum. We have, however, witnessed the complaint in a female, beginning in the bladder and proceeding till it finally destroyed the patient, without either the uterus or the rectum being in the least diseased. The glans penis and extremity of the urethra have not uncommonly been affected with it. There seems to be some confusion in the ideas of the author concerning the nature and origin of cancer in general, in the following passage:

" Lorsque le cancer affecte l'urètre, on cherche à remonter à la cause qui l'a déterminé. Si c'est le vice syphilitique, on administre un traitement approprié; si la maladie est due à une fistule urinaire, on tâche de la faire cesser.* On administre aussi, à l'intérieur, les extraits de ciguë, de cynoglosse; on fait des bains locaux avec leurs décoctions, en les unissant aux mucilagineux, pour qu'ils ne soient pas irritans et n'agissant pas comme styptiques, ce que j'ai vu arriver plusieurs fois. L'on retire aussi quelqu' avantage des bains locaux avec les décoctions, ou les sucs de douce-amére, de laitue sauvage de morelle. D'autres fois, on n'éprouve de soulagement que des bains locaux mucilagineux et calmans.

" Les caustiques partiels sont dangereux; ils ne font que hâter la dégénérescence cancéreuse. Cependant, lorsque la maladie ne fait que commencer, qu'elle n'intéresse qu'une petite surface du gland, l'on peut, selon M. Dubois, en opérer la guérison par l'application d'une pâte arsénicale qui détruit avec célérité tout la surface affectée.

" La maladie occupe-t-elle tout le gland, il faut se hâter d'en faire l'extirpation, avant qu'elle se soit propagée jusqu'à la racine du membre viril, ou qu'elle ait produit l'engorgement des glandes de l'aine, ce qui rendrait l'opération infructueuse.

" Pour faire cette extirpation, on saisit le membre viril avec la main gauche, ayant la précaution de retirer les tégumens vers le gland, et l'on retranche la partie malade avec un bistouri.

" Après avoir fait la ligature des vaisseaux qui donnent du sang, on introduit une sonde dans la vessie, pour que l'urètre et les corps caverneux ne se retirent pas du côté du pubis, et que l'ouverture du canal ne soit pas oblitérée par la peau qui se replie sur elle même, et par la cicatrisation de la plaie.

" Si les corps caverneux, malgré la ligature des vaisseaux, fournissaient trop de sang, on arrêterait l'hémorragie au moyen de la

" * *Voyez* des Fistules urinaires."

compression

compression et des styptiques. La plaie doit ensuite être traitée avec un pansement ordinaire."

We do not deny that a venereal sore may sometimes become cancerous, unusual as the occurrence is; but, when the author goes on to designate the callosities which surround a urinary fistula by the same name, it will account for the cures of cancer which are often talked of, but which we fear have never taken place where the disease has been of the true carcinomatous structure.

We beg leave to make one more remark on this passage of the author on the amputation of the penis. The use of the sound into the bladder after the operation, we believe is not only unnecessary, but often injurious to the patient.

The chapter on urinary calculi in the bladder and urethra contains many very useful remarks, but, as their utility is more conspicuous than their novelty, we shall not particularly notice them. The smaller species of calculus which is so frequently found in the diseased prostate gland, is well described in the following chapter; and it will be remarked that the opposite lobes of the prostate gland are very differently affected with disease, in the case here described, which, whatever be its cause, we have often remarked in similar cases, one side or lobe often being considerably enlarged, while the other is but little altered.

" *Des calculs de la prostate.*—Il peut se former dans la substance même de la prostate de petits calculs d'une nature particulière, bien observés par Morgagni,* et que j'ai eu occasion de rencontrer moi-même.

" Ces calculs sont logés dans des sinus ou dans une sorte de canal excréteur, creusé dans la prostate ou même à l'embouchure des conduits éjaculateurs. Quelquefois on n'en trouve que deux ou trois; le plus souvent il y en a un grand nombre. Tantôt ils sont très-petits, du volume d'un grain de millet; tantôt, aussi gros qu'une cerise: la plupart sont globuleux, transparens, d'un rouge de grenat ou d'un jaune safrané. On a dit qu'ils étaient de même nature que les calculs urinaires; il est vrai que ces derniers calculs peuvent s'arrêter ou même se former dans quelque cavité ou sinuosité de la membrane interne de l'urètre, à l'endroit de la prostate; mais les calculs qui se forment dans la propre substance de cette glande sont de toute autre nature, et l'analyse chimique n'en a pas été faite. J'en ai envoyé une petite quantité à MM. Fourcroy et Vauquelin en les invitant à la faire.

" Ces calculs ne proviennent point d'une communication du sphincter de la vessie ou des environs avec la prostate, comme l'ont avancé quelques auteurs; ils sont étrangers aux vices de l'urine: les

* *Voyez* De sed. morb. calculi in prostatis, t. 2, p. 422.

causes

causes qui les déterminent sont tout-à-fait inconnues. Il produisent ordinairement une tuméfaction lente de la prostate, et par suite son inflammation chronique, à moins que cette inflammation ne donne lieu elle-même à la naissance de ces calculs.

" J'ai fait avec M. Mareschal, il y a peu de mois, l'examen de la vessie d'un homme de soixante ans, mort à la suite d'une rétention d'urine; la vessie était en bon état, la prostate très-gonflée, divisée en deux lobes; l'un, du côté droit, dur, rougeâtre, enflammé; l'autre, du côté gauche, blanchâtre, très dense, avec quelques points de suppuration, contenait dans son intérieur une grande quantité de petits calculs, tandis que l'autre lobe n'en contenait aucun.

" Quelquefois ces calculs se fraient un passage jusque dans l'urètre, et sont ensuite rendus avec l'urine; les symptomes qu'ils ont occasionnés disparaissent, et les malades sont rendus à la santé.

" Je connais un homme de lettres, qui, après avoir éprouvé pendant près de quatre mois des doleurs, des difficultés d'uriner, rendit quelques-uns de ces calculs et se trouva délivré de tous ces accidens. Depuis tres ans, l'urine a repris son libre cours.

" Les calculs de la prostate sont peu dangereux par eux-mêmes, mais bien par le gonflement qu'ils déterminent.

" On doit se borner dans leur traitement à calmer les symptômes inflammatoires auxquels ils donnent lieu, et, si le cours de l'urine est intercepté, dilater au moyen des bougies la portion prostatique de l'urètre; attendre que la nature procure elle-même l'évacuation de ces calculs, et employer ensuite les moyens indiqués contre l'engorgement de la prostate.* Si cependant ces calculs faisaient saillie au périnée, ce qui doit être extrêmement rare, on en pourrait faire l'extraction, en faisant une incision sur la tumeur à l'endroit de cette glande."

The presence of worms of different species in the bladder, forms the subject of the following chapter. No distinct diagnosis is or can be given of this affection, but the appearance of them when evacuated; and even this is subject to delusion and imposition. The only means recommended by the author is the use of mercurial injection into the bladder.

Whatever has been thought necessary on so important a subject as the induration of the prostate, is comprised in less than *three pages*, and it is not surprising. But M. Nauche has condensed almost all the useful information we possess on the subject in this small compass; even the pretended discovery of Sir Everard Home is very clearly described and anticipated. We shall extract the whole chapter, making our protest at the same time against the idea that the disease is the consequence of lues venerea. We have, however, before commented on the indistinct notions of the generality of French surgeons on this subject.

* *Voyez* de l'Inflammation de la prostate et de son endurcissement.

" *De*

" *De l'endurcissement de la prostate.*—Sans avoir éprouvé aucune inflammation apparente, la glande prostate est sujette à augmenter de volume, à s'engorger et à acquérir par degrés un endurcissement squirreux.

" Cet endurcissement se reconnait aux douleurs et aux difficultés d'uriner qu'il occasionne. Le jet du liquide diminue insensiblement et finit par disparaître; en portant profondément un doigt dans le rectum, on trouve cette glande tuméfiée et indolente.

" L'introduction d'une sonde dans l'urètre est facile jusqu'à la glande, et éprouve ensuite la plus grande difficulté.

" Cet engorgement, très-fréquent dans le moyen âge, est rarement guéri dans un âge avancé: il est ordinairement la suite d'une inflammation syphilitique de la prostate; quelquefois il survient, sans être précédé de symptômes inflammatoires, et paraît déterminé par la présence de petits calculs développés dans sa substance.* La prostate acquiert peu à peu beaucoup de volume, devient molle, fongueuse, sans éprouver d'altérations sensibles dans son tissu. Dans quelques cas, il n'y a d'affecté que la partie de la glande à laquelle on donne le nom de luette vésicale.

" Cette luette, suivant, M. Sabatier, peut former une tumeur ronde, d'un demi-pouce de diamètre, portée sur un pédicule étroit. Elle s'oppose au passage de l'urine en se plaçant à l'entrée du col de la vessie, sur lequel elle est entrainée par le flot du liquide.

" L'engorgement de la prostate est très-fâcheux, à raison de la difficulté que l'on éprouve à en obtenir la guérison, de la rétention d'urine qui en est la suite, et de l'impossibilité ou l'on est souvent de sonder le malade, ce qui peut nécessiter la ponction de la vessie, laquelle doit être pratiquée alors au-dessus du pubis.

" Cet engorgement reconnu, l'on examine s'il n'y a pas de symptômes de la maladie syphilitique, et dans ce cas l'on fait subir un traitement approprié; on retire souvent de bons effets des frictions au périnée avec l'onguent néapolitain double, dans l'intérieur même du rectum, à l'endroit ou la glande prostate fait saillie; les douches ascendantes, dirigées sur le fondement, sont aussi parfois très-utiles; mais ce sont principalement les bougies et les sondes de gomme élastique qui produisent les meilleurs effets. Leur introduction, avec des grosseurs graduées, dilate peu à peu la portion de l'urètre située dans l'epaisseur de la glande, et facilite l'écoulement de l'urine, dont la suspension est l'accident le plus dangereux de l'engorgement.

" Il est bon de recourir aux bougies dès les premiers tems de la maladie, et de revenir à leur usage dès qu'on s'aperçoit d'une nouvelle diminution dans le calibre du canal, de crainte que ce dernier ne s'obstrue entiérement, ce qui mettrait la vie des malades en danger."

The chapter on stricture of the urethra contains nothing either new or remarkable, but the unusual candour and ingenuousness of the author in allowing the constant and ne-

* *Voyez* des Calculs de la prostate.

cessary

cessary disposition of strictures to return after they have once affected the urethra. In this we believe he is almost single among the many writers on the subject: there are no boasts of permanent cure by caustic or other means, but a frank avowal of what is really the truth of the case. "It is a law," says the author, "common to every canal destined to give passage to fluids, that, when they have once experienced an alteration of structure, it is almost (he might have said quite) impossible to restore them to their primitive state. Thus, persons who have had a fistula lachrymalis, or an involuntary flow of tears, from an ulcer in the inner angle of the eye, and obstruction of the lachrymal duct, are always subject and predisposed to a return of the complaint, in whatever mode they may have been cured.

The remaining chapters of this little manual or treatise are occupied on the use of the bougie and other modes of relieving strictures, and their consequences, such as fistula in perinæo, suppression of urine, &c. which, as there is no peculiarity in the pathology or treatment, we shall not pursue in detail, but conclude our analysis with observing, that, with some allowance for the vague notions of his countrymen on syphilis, it may be in general considered as a concise and good abridgment of the nature and treatment of the diseases of the bladder and urethra,—not only those of old age, as its title imports, but those also which are incident to the more early periods of life.

Observations on those Diseases of Females which are attended by Discharges; by CHARLES MANSFIELD CLARKE, Member of the Royal College of Surgeons, &c. Longman and Co. 8vo. pp. 304.

WE congratulate the profession upon the appearance of a publication on a subject of great practical importance, from the pen of Mr. C. CLARKE. In the treatment of diseases of Females, few have had more extensive opportunities than this gentleman, and still fewer possess an equal ability to render that experience profitable to mankind. Too often are we doomed to fret over the pages of the visionary theorist, and but rarely called upon to record the sentiments of the real practitioner: few, indeed, engaged in the active duties of their profession, feel sufficient interest or philanthropy to take upon them the less profitable task of the writer—an office consigned to the mere adventurer, who hopes to be and frequently is successful, in proportion to the number of lies he can tell. The object of Mr. Clarke, in the present publication, is to make some arrangement in the sexual diseases of females; and to show that diseases having some symptoms in common, are nevertheless very dissimilar in character, and require very different treatment: it occurred

curred to him that some are attended by no discharge from the vagina; others, on the contrary, never occur without it, and the nature of the discharge varies. Here then appeared a ground of classification, the utility of which is illustrated by the following supposition:—A practitioner is not quite sure whether a tumour in the vagina is a soft polypus or a cauliflower excrescence; if he knows that one of those diseases is attended by a mucous discharge, and the other by a discharge of water, he has nothing to do but to inquire into this circumstance, and the question is immediately solved. The entire work will consist of a series of which the present volume is but the first part, and is devoted to the consideration of *mucous discharges*. The purulent watery and white opaque discharges will be considered in the remaining parts.

The author observes, that "The discharges from the parts of generation come away from the os externum; but they spring from various sources, and are of different kinds. The parts from which these secretions arise, are:

1. The internal surface of the uterus and of the fallopian tubes.
2. The inner membrane of the vagina.
3. The lacunæ about the os externum.
4. The mucous membrane of the urethra.*

These will be separately considered.

1. The secretions from the uterus. These are:

α. The menstruous secretion.

β. The secretion from the mucous membrane of the uterus, which extends to the cavities of the fallopian tubes.

γ. The secretion from the glands in the neighbourhood of the cervix of the uterus."

(To be continued.)

MEDICAL AND PHILOSOPHICAL INTELLIGENCE.

ROYAL SOCIETY.—On Thursday, the 26th of May, a paper, by Sir Everard Home, bart. on the Effect of different Injuries in the Brain upon Sensation, was read. The attempts to determine the functions of the different parts of the brain not having been attended with success, Sir Everard conceives that it would promote the advancement of physiology if medical men were to collect together, and arrange the effects produced by different diseases or injuries of the brain. The present paper contains the result of his own practice. It is divided into ten sections. 1. On the effect of water accumulated in the ventricles. Water accumulated in the ventricles,

* "These are the surfaces from which the natural secretions arise: but discharges from the os externum may originate from the surfaces of newly-formed tumours, as the cauliflower excrescence; or they may be the contents of cysts of hydatids."

even

even to the amount of 6½ ale pints, does not destroy the faculties, provided the bones of the cranium be not united, and the head enlarge according to the accumulation. A curious case was related of a young man whose head had increased enormously, and who retained his faculties entire, except some inconveniences from the size and weight of the head. He was in his nineteenth year, and the head was 33 inches in circumference. When the bones of the cranium, being united, prevent the head from enlarging, the accumulation of water in the ventricles destroys the faculties, and produces idiotism and death. 2. On the effects of concussion. It occasions nausea and vomiting, giddiness, and apoplectic fits, which return at intervals for some time. 3. On the enlargement of the blood-vessels of the brain. It occasions violent headaches, watchfulness, and disorders of the bowels. The beating of the arteries of the brain has been supposed essential to the exertion of the senses; but John Hunter retained his senses after the heart had apparently ceased to beat. 4. On the extravasation of blood. It produces similar effects as the accumulation of water; coma, nausea, apoplexy. 5. On the effects of the formation of pus. It occasions melancholy, lowness of spirits, and mania, with incessant talking. 6. On the effects of external pressure. The depression of the scull occasions loss of memory, the incapacity of using the proper conversation, &c. all which disappear when the cause is removed. 7. Internal pressure from tubercles produces similar effects. 8. Hydatids in the brain occasion bowel complaints, and a comatose state of the rectum and bladder. 9. Wounds in the brain occasion no symptom whatever, nor the destruction of any of the faculties. When a fungous excrescence of the brain takes place through a hole in the scull, the œsophagus becomes so sensible as to prevent the swallowing of solids, from the pain which they occasion. 10. Injuries of the spinal marrow in the neck, occasion paralysis of all the parts of the body below the injury.

An account of the diuretic powers of the *Pyrola umbellata* of North America, was read at the last meeting of the Medico-Chirurgical Society. This plant has been long since used by the Indians, in cases supposed to arise from defective secretion of urine, and promises to be a valuable acquisition to the materia medica. It has the property of increasing the appetite, and has been found serviceable in some cases of dropsy.

The following is said to be a very efficacious application for rheumatism, and is known by the name of Sanchez's Balsam:—Aromatic soap, an ounce; spirit of lavender, 4 ounces; camphor, 2 ounces; essential oils of peppermint, canelle, lavender, muscade, quaffle, sassafras, of each 15 drops; acetic æther, an ounce. The editor of the *Journale Generale de Medecine*, from whom we take the account, considers the efficacy of the remedy to reside principally in the acetic æther.

Mr. WANT is authorized by Sir JOSEPH BANKS and Major RENNELL, to publish their decided conviction that his Medicine, (an account of which was given in our last Number,) and the Eau Medicinale, are the same, as far as they are enabled to judge from the appearance, taste, and smell. Several gentlemen conversant with the latter, who have seen Mr. Want's preparation at Sir Joseph's house, are of the same opinion.

We understand a case of the successful treatment of Trismus, has lately occurred at the Westminster Hospital. A robust young man was brought in with his jaw firmly locked, in consequence, as was supposed, of the bite of a dog, between the finger and thumb. It was resolved to try the effects of copious blood-letting. He was bled from the arm till he fainted, which was evidently followed by a relaxation of the jaw. Next day he was cupped behind the ears, and upon the back, till the same effect took place. The jaw now opened almost half an inch, and he was enabled to take some nourishment, but the contraction returned towards evening. The third day he was again bled from the arm *ad deliquium*. The disease was now so far removed, that he was able to make a hearty dinner of boiled salmon, and drink some porter. Hearing some conversation about bleeding him again the next day, to which he was always very averse, having no sense of his danger, he left the hospital without leave. It is known, however, that he perfectly recovered, and is now quite well. He lost in all about sixty ounces of blood. The only medicine he took was a grain of tartarized antimony with two grains of opium each night at bed-time. Though this may not be considered as a very decided case of that species of trismus which has almost invariably proved fatal, it at least affords encouragement to give the same remedy a more full trial than it has hitherto experienced.

A Marvellous Tale of Spontaneous Combustion in a Woman, from Leroux's Journale de Medecine.

Dr. PROUTEAU, at one of the meetings of the Société de Medecine Pratique, communicated a very remarkable fact of spontaneous combustion. A woman, 28 years of age, excessively fat, and addicted to drinking of spirits, (the doctor could not have hit upon a better subject for this miracle,) was found on fire in her chamber, where nothing else was burning. The neighbours who came in threw water on the body, already deprived of life; and related, that as they entered they heard a noise of something frying. She was lying about three feet from the chimney, the fire of which was concentrated in the hearth. The body left upon the floor a layer of black grease; and a book, in which she had probably been reading, was found untouched by the flame. The face and tongue were entirely consumed and reduced to a coal. Beneath the left breast, which was in part destroyed by the combustion, was an opening three inches in diameter, by which the doctor introduced his hand into the chest, and touched several ribs, which he broke with as much facility as if they were calcined, &c. He concludes his narrative by giving his opinion,

opinion, that the combustion began in the internal parts, and that the clothes were burned secondarily.

Pemphigus is a disease of somewhat rare occurrence, and we believe has not very frequently been observed to prevail epidemically. Mons. PATIET has seen it assume this character in the village of Batterans, containing about 294 inhabitants, without any apparent cause for such an anomaly. It came on with the usual symptoms of fever, in addition to which the patients were affected with general tumefaction, and an insupportable degree of itching. On the third day, vesicles, varying in size from that of a grain of hemp-seed to that of a walnut, appeared on every part of the surface of the body, but more particularly upon the abdomen, the arms, and the thighs. They contained a transparent and inodorous fluid, were easily broken, and left a violet brown spot upon the skin, which soon disappeared. In slight cases the fever sensibly abated after the appearance of the eruption, and the cure was effected in a week. In some cases, typhoid symptoms supervened, but the author does not state that the disease terminated fatally in any instance. He gave an emetic on the accession of the disease; and, with respect to the after treatment, he says nothing more than that he employed the Aqua Ammoniæ Acetitis, blisters, diffusible tonics, and camphor, in cases requiring them, but that the emetic and nitrous draughts were generally all that was necessary. Out of 294 inhabitants, 35, principally children, were attacked with the disease.

The Hepar sulphuris has been successfully applied by M. BERTRAND to tettery eruptions (*affections dartreuse*). As the French term *dartre* implies a variety of affections, we subjoin the description of two cases where it was useful.

1st. *Dartre rougeante.*—A woman of 57, had for seven years past suffered from a continual itching in the external parts of generation. On examination, little ulcerations (*disposées en plaques*) were discovered, from which a corrosive ichor was discharged. Hip Batters were employed, in which two drams of the medicine were dissolved, and afterwards an ointment composed of one third of Hepar Sulph. and two thirds of simple cerate.

2d. *Dortre squameuse* (scaly tetter).—A woman, three years since, was subject to eruptions sometimes on the back of the hands and feet, and sometimes on the face. These eruptions being principally on the face, their hideous appearance induced the patient to apply for advice. They appeared on the cheeks under the form of thick scales, at first white, then of an ash colour, going successively through all their periods to a state of desiccation, when they fell off to reappear. Two ounces of Hepar Sulph. were dissolved in a bath for the whole body. The ointment was used as before, though somewhat weaker.

Singular Disease.—In the country of the Nogays, a tribe of Tartars dwelling between the Black Sea and the Caspian, on the south side of the river Kuma, there still exists a very singular disease,

which is mentioned by Herodotus, and several of the other ancient Greek writers. Herodotus informs us, that when the Scythians were inhabitants of Asia, they advanced towards Egypt, but were prevailed upon by Psammetichus, king of that country, to desist. On their return through Syria, they plundered the temple of Urania, in the city of Askalon. In consequence of this, the goddess sent a *feminine disease* among them.

Reineggs is the first modern writer who mentions the present existence of this disease among the Nogays, who are at present subjects of the Russian empire. Count Potocki, when travelling along the Kuma, in 1798, met with an old man who had this disease. He informed us that such persons are called Coss; and that the disease is not unknown in Turkey, where those subject to it have received the same appellation. The disease, as far as it has been described by Reineggs and Potocki, is distinguished by the following symptoms. It only attacks old persons. The skin grows wrinkled, the beard falls off, and the person assumes completely the appearance of a woman. He becomes incapable of propagating his species, and his sentiments and actions lose their masculine character. In this state he is obliged to shun the company of men and to associate with women, whom he perfectly resembles. The disease is now rare.

The Gazette de Santé, dated the 21st of June, contains two cases of Laryngitis, *Angine Laryngée œdemateuse, Gonflement ou œdeme de la Glotte*, which occurred in the Hotel Dieu, during a cold, rainy, and very variable season. A young man, convalescent from fever, early in the morning took cold; at noon he complained of general uneasiness, slight chills, and heat in the bottom of the throat; at four o'clock felt acute pain in the larynx; *inspiration was performed with great pain, but no difficulty was felt in expiration;* the voice was shrill and tremulous, deglutition difficult, countenance florid, pulse contracted and frequent. Five leeches were applied to the neck, and afterwards a cataplasm. He was not relieved by these means, had no sleep, and his anxiety was very great. On the following day his symptoms had increased; countenance was of a livid hue; *expiration* tolerably easy. The patient held his head backward, to facilitate *inspiration*, which was performed with *inexpressible anguish; the pulse was hard, small, and frequent.* Five leeches and a blister were applied. He died at two o'clock. After death, the face, neck, and head, were suffused with blood. On dissection, the *mucous membrane of the epiglottis, glottis, and ventricles of the larynx, were inflamed and thickened.* The cellular texture anterior to and at the root of the epiglottis was so large, that the latter was pushed back toward the opening of the larynx, which was much contracted; the trachea was healthy. If we had not such frequent specimens of the want of energy in the practice of the French physicians, we should suspect that man of idiotcy who could suffer inflammation of the larynx to run its course without the employment of blood-letting. If any disease require

require depletion to its fullest extent, it is this in its acute state, which makes such rapid strides towards its fatal termination. The unutterable anguish, suffusion of the countenance, and gasping for breath, ought to be sufficient to induce at least a trial of the remedy, even if the inflammatory character of the disease were not so distinctly marked. We observe in the same narrative, a striking confirmation of the inconsistency of the attending physician. A case of Angina Trachealis (croup), in an adult, is adduced for the purpose of instituting a comparison between the two affections so nearly resembling each other in name. This case, compared with the former, is not remarkable for intensity of suffering, or great danger; yet, on the fourth day of the disease, *fifteen leeches, and, on the fifth, twenty more were applied to the throat, with advantage.* Now, if thirty-five leeches are necessary for the cure of a case of *Angina Trachealis*, we are at a loss to conceive upon what principles of calculation our continental friend discovers ten to be sufficient for the cure of that horrid assemblage of symptoms characteristic of *Angina Laryngea.* The reporter very properly recommends bronchotomy in the latter, as the means of averting suffocation. It will be obvious, that if the larynx be obstructed so as to make the ingress of air into the lungs difficult or impossible, this operation is our only resource: our past experience does not indeed warrant an expectation of *cure* from it; but, so long as the opening in the trachea is preserved, the symptoms are very considerably abated, as might, *à priori*, be expected. We submit to the consideration of our brethren in the profession, whether it should not be performed before the disease has arrived at its acme: the suffering of the patient would in a great measure be removed *in limine*, and perhaps a source of irritation destroyed, which may have a tendency to aggravate the disease.

M. Hagstroem, in a man who died of dysentery, found the lower part of the ileum and the large intestines indurated and gangrenous on their internal surfaces.

M. le Gallois, in the Dictionary of the Medical Sciences, has considered the heart, with respect to its anatomical and physiological characters. After having given an exact description of the position, form, and structure of this organ, with the phenomena of its movements, he has been induced to discuss a question which has frequently excited the attention of physiologists, viz. the unequal capacities of the ventricles. Different explanations had been given, which on the subject were but little satisfactory, when M Sabatier maintained that this inequality arose after death, from the accumulation of blood which took place in the right cavities at the last moments of life. He supported his opinion by the fact, that individuals who die of hemorrhage, from a rupture of the vena cava, have the two ventricles of the same capacity, &c. M le Gallois, with the view of solving this important question, has instituted many experiments. After cutting away the two auricles, the aorta and pulmonary

pulmonary arteries, at their origin, he filled the ventricles with mercury, and then separately weighed the quantity requisite to fill each ventricle. In every case the right was found to be larger than the left, and the difference was sometimes so great, that it appeared difficult to account for its existence in the healthy state. But, considering that, from a cause analogous to that which produces the rigidity of the muscles subject to the will, after death, the ventricles might be so influenced, and the left being the strongest in muscular structure would be consequently contracted the most. He endeavoured to overcome this rigidity, by kneading the ventricle with his fingers, and he in fact succeeded in enlarging the capacity. Some of the animals whose hearts were employed in these experiments were destroyed suddenly, others from hemorrhage, and in all the cavity of the right ventricle exceeded that of the left: the only exception was in the rabbit, where the capacity of the left surpassed that of the right, but it is doubtful whether this is a universal appearance. In the fœtus the same disposition exists, which may be owing to the particular mode of its circulation. M. le Gallois thinks that the reason of two ventricles of unequal capacities emptying themselves to the same degree during their sistole, is owing to a reflux of the blood of the right ventricle into its auricle, and which the arrangement of the value easily admits; the fact he conceives is incontestible.

M. le Gallois has also considered the circulation of the blood in the fœtus. According to M. Sabatier, the blood of the two venæ cavæ does not pass together through the foramen, but that of the inferior is directed by the Eustachian valve, and that of the superior enters directly the right ventricle, from whence it passes into the pulmonary artery by the arterial canal. M. le Gallois is of a different opinion: he conceives the Eustachian valve to be insufficient to perform this function; as in that case, instead of being placed at the anterior edge of the vena cava and the foramen, it ought to have been at the posterior; that it was sufficiently elevated to cover the greatest part of the diameter of the vena cava inferior, and that it was inclined towards the vein in the manner of an arch, through which the blood of the superior vena cava glides. The disposition of the Eustachian valve appears then most proper to favour the mixture of the blood coming from the two venæ cavæ, than to oppose such a union.

At a meeting of the *Société Philomatique* of Paris, on the 28th of May, 1814, Messrs. de Blainville and Magendie gave an account of Sir W. Adams's treatise upon Ectropium, &c. of which we made honourable mention in our Critical Analysis for April 1813. After noticing the leading features of the work, which they highly praised, Messrs. Blainville and Magendie concluded their report with very strongly expressing their admiration of the author's talents, and the benefit which he has conferred upon the profession; and recommended him as a corresponding member of the society. The proposition was unanimously adopted.

A large

A large biliary calculus was presented by M. Meglin to the *Athenée de Médecine* of Paris, which was extracted from the body of an old cavalry officer, in whom, during life, no symptoms were present that could lead to a suspicion of its existence. It completely filled the cavity of the gall bladder. The patient died of an organic affection of the *urinary bladder*, which had acquired an immense size, and ascended to the umbilicus. It was several lines in thickness, and its muscular membrane was entirely cartilaginous. During the latter years of his life, he suffered much from difficulty in passing urine. At length an abscess, preceded by inflammatory symptoms, was formed at the bottom of the bladder: when this broke, the effusion of urine and pus in the abdominal cavity produced visceral inflammation, which terminated in gangrene. He now complained of acute and burning pains in the abdomen, flatulency, inextinguishable thirst, and hiccup; his pulse was small, frequent, and contracted; respiration hurried; countenance livid, and extremities cold. In forty-eight hours death put a period to his sufferings.

Six other calculi, voided by a female long affected with hepatic colic, were also presented. The pain was sometimes so intense as to bring her into great danger, during a paroxysm of most acute insupportable pain, with icterus. Bleeding was had recourse to, after which she took Durand's dissolvent remedy (sulphuric æther and oil of turpentine) for six months. In this time she passed fifteen calculi, and was completely cured. M. Meglin speaks very confidently of the efficacy of the remedy. We believe M. Portal, in his treatise on Diseases of the Liver, speaks with some doubt on this point.

M. Zetherman has given an account of a dumbness occasioned by a calculous concretion, situated on the left of the frænum linguæ, and probably in the salivary duct. The patient was enabled to speak (at the age of fourteen years) after having spit out this stone, which was the size of a turkey-bean. The same gentleman found a tuft of hair in a vesicular tumour which he extirpated from the eyelid.

M. de Bierken had under his care a girl twelve years of age, whose tongue was so large that its point fell upon the chin, causing the eversion of the lower lip, and giving to the anterior teeth an horizontal direction. The deglutition had become difficult, the voice unintelligible, and the larynx projected. The disease had existed from the age of two years, but once was cured by replacing it (as we suppose, by confining it to its situation for a time). It was at length determined to extirpate it, which was done with complete success: the tongue was pierced by a needle with double ligature in two places; the space between the ligatures was first tied, and then the lateral portions; a part of the tongue was suffered to remain; she recovered her voice and deglutition; the lip retook its primitive situation; and the teeth, after being extracted, were replaced in a vertical direction, and properly secured.

Dr. SQUIRE will on Thursday, the 18th of August, begin a course of Lectures on the Theory and Practice of Midwifery, and the Diseases of Women and Children.

In the Press, and will appear at the latter end of August,
Facts and Observations on the Nature and Treatment of Liver Complaints, and Bilious Affections in general; deduced from long and extensive Practice in various Climates. The whole illustrated by Cases. By JOHN FAITHORN, formerly Surgeon in the Hon. East-India Company's Service.

According to the report of several *Apothecaries* residing in various districts of the metropolis, the following was the average of the diseases in London between May 20th and June 19th:—

Anasarca	26	Epilepsia	8	Peritonitis	12
Ascites	16	Epistaxis	2	Phrenitis	7
Asthma	65	Febris remittens	137	Pneumonia	66
Acne	7	—— intermittens	28	Pleurodyne	4
Apoplexia	13	—— puerpera	7	Podagra	28
Aphtha	17	Gastritis	2	Porrigo larvalis	6
Amenorrhœa	33	Gastrodynia	48	—— scutulata	11
Asthenia	73	Hæmatemesis	5	—— favosa	18
Abortio	19	Hæmoptoe	23	Psoriasis	30
Bronchitis acuta	19	Hæmorrhois	39	Prurigo preputialis	1
—— chronica	9	Hepatitis	43	Purpura	2
Cancer	5	Hysteria	38	Pyrosis	13
Chlorosis	26	Hysteritis	8	Rachitis	6
Cholera	42	Hydrocephalus	13	Rheumatis. acut.	86
Chorea	3	Hydrothorax	6	—— chron.	79
Cephalalgia	74	Herpes	20	Rubeola	141
Colica	33	Hypochondriasis	20	Roseola	17
Catarrhus	260	Icterus	14	Scabies	93
Convulsio	11	Impetigo	15	Synochus	21
Carditis	2	Ischuria	7	Scarlatina simplex	11
Cynanche Tonsillaris	98	Leucorrhœa	31	—— anginosa	8
—— maligna	17	Lepra	5	Splenitis	1
—— Trachealis	2	Lichen	17	Scorbutus	2
—— parotidea	13	Mania	14	Scrofula	39
Diabetes	1	Menorrhagia	48	Typhus	15
Dysenteria	11	Miliaria	12	Tabes Mesenterica	21
Diarrhœa	136	Morbi Infantiles	200	Tic Douloureux	2
Dyspnœa	25	—— Biliosi	244	Variola	29
Dyspepsia	146	Nephritis	7	Varicella	25
Dysuria	10	Obstipatio	52	Vermes	46
Eczema	1	Odontalgia	5	Vertigo	41
Erythema nodosum	6	Ophthalmia	75	Urticaria	14
—— marginatum	1	Phlogosis	4		
Erysipelas	53	Pemphigus	3	Total	3550
Enteritis	13	Paralysis	29		
Enterodynia	30	Phthisis Pulmonalis	40		
Enuresis	2	Pertussis	70		

The Deaths in the Bills of Mortality from May 10th to June 21st, 1814, according to the returns of the *Parish Clerks*, were as under:—

Males	1049
Females	974
Total	2023

LONDON

LONDON PRICES OF DRUGS.—July 22.

(To be continued regularly.)

	£	s.	d.	£	s.	d.	per
Aloes Barbadoes, from	20	10	0	to 21	0	0	C.
—— Cape	10	0	0	.. 11	0	0	—
—— Succotrina	20	0	0	.. 0	0	0	—
—— Epatica or E.I.	14	0	0	.. 16	0	0	—
Angelica Root	9	0	0	.. 0	0	0	—
Alkanet Root	6	0	0	.. 0	0	0	—
Antimony Crude	2	15	0	.. 3	3	0	—
Aqua Fortis	S.	0	8	.. D.	1	1	lb.
Arrow Root fine	0	2	0	.. 0	3	6	—
—— ordinary	0	1	0	.. 0	1	6	—
Arsenic Red	5	10	0	.. 6	6	0	C.
—— White	2	15	0	.. 0	0	0	—
Balsam Capivi	0	6	0	.. 0	6	3	lb.
—— Peru	1	0	0	.. 1	1	0	—
—— Tolu	0	14	0	.. 0	14	6	—
Bark Jesuits', Com.	0	3	6	.. 0	0	0	—
—— Second	0	6	0	.. 0	7	0	—
—— Quil or best	0	8	0	.. 0	10	0	—
—— Red	0	7	0	.. 0	10	0	—
—— Yellow	0	4	6	.. 0	5	0	—
Borax refined E.I.	none.						
—— English	0	3	9	.. 0	4	0	lb.
—— unrefined or Tinc.	10	0	0	.. 11	0	0	C.
Camphire refined	0	8	9	.. 0	9	0	lb.
—— unrefined	28	0	0	.. 32	0	0	C.
Cantharides	0	8	10	.. 0	0	0	lb.
Cardamoms (best)	0	7	0	.. 0	12	0	—
Cassia Buds	36	0	0	.. }	0	0	C.
—— Fistula W.I.	6	10	0	.. } in bond			—
—— Lignea	25	0	0	.. }	0	0	—
Castoreum American	2	10	0	.. 2	15	0	lb.
—— Russia	11	0	0	.. 0	0	0	—
Castor Oil per bottle 1½ lb.	0	3	9	.. 0	4	3	bo
Cocculus Indicus	6	0	0	.. 7	0	0	C.
Colocynth Turkey	0	5	0	.. 0	5	6	lb.
Columbo Root	4	15	0	.. 6	0	0	C.
Cream of Tartar	6	0	0	.. 6	10	0	—
Gallangal East-India	5	0	0	.. 0	0	0	C.
Gentian Root	3	5	0	.. 3	6	0	—
Ginseng	0	1	6	.. 0	0	0	lb.
Grains of Guinea	6	6	0	.. 6	10	0	C.
Gum Ammo. Drop	30	0	0	.. 0	0	0	—
—— Lump	8	0	0	.. 9	0	0	—
—— Animi	3	10	0	.. 7	10	0	—
—— Arabic E.I.	2	0	0	.. 4	0	0	—
—— Turkey Fine	10	10	0	.. 14	14	0	—
—— Barbary	7	7	0	.. 8	0	0	—
—— Assafœtida	10	0	0	.. 15	0	0	—
—— Benjamin	8	10	0	.. 35	0	0	—
—— Cambogium	20	0	0	.. 26	0	0	—
—— Copal scraped	0	3	0	.. 0	4	6	lb.
—— Galbanum	16	0	0	.. 20	0	0	C.

	£.	s.	d.	£.	s.	d.	per
Gum Guaiacum, from	0	2	6	to 0	3	0	lb.
—— Mastic	0	4	6	.. 0	4	9	—
—— Myrrh	15	0	0	.. 18	0	0	C.
—— Olibanum	6	0	0	.. 7	0	0	—
—— Oppoponax	80	0	0	.. 0	0	0	—
—— Sandrac	9	0	0	.. 10	0	0	—
—— Seneca Garbled	5	2	0	.. 5	5	0	—
—— Tragacanth	36	0	0	.. 38	0	0	—
Jalap	0	5	0	.. 0	5	3	lb.
Ipecacuanha	1	0	0	.. 1	1	0	—
Isinglass Book	0	10	6	.. 0	11	0	—
—— Leaf	0	9	0	.. 0	9	4	—
—— Long Staple	0	10	0	.. 0	0	0	—
—— Short Staple	0	9	9	.. 0	0	0	—
Manna Flakey	0	5	3	.. 0	5	6	—
—— Sicily in Sorts	0	4	0	.. 0	4	3	—
Musk China	0	18	0	.. 1	0	0	oz.
Nux Vomica	3	0	0	.. 3	10	0	C.
Oil of Vitriol	0	0	3½	0	0	0	lb.
Opium East-India	1	2	0	.. 1	3	0	—
—— Turkey	1	9	0	.. 1	10	0	—
Pink Root	0	4	0	.. 0	4	6	—
Quicksilver	0	4	10	.. 0	0	0	—
Rhubarb East-India	0	6	0	.. 0	10	0	—
—— Russia	0	18	0	.. 1	0	0	—
Saffron Spanish	2	5	0	.. 2	10	0	—
—— French	1	15	0	.. 2	0	0	—
Sago	7	0	0	.. 8	0	0	C.
Sal. Ammoniac	10	10	0	.. 11	0	0	—
Sarsaparilla	0	3	0	.. 0	3	6	lb.
Sassafras	7	0	0	.. 8	0	0	T.
Scammony Aleppo	1	6	0	.. 1	7	0	lb.
—— Smyrna	0	10	0	.. 0	12	0	—
Senna	0	3	0	.. 0	3	6	—
Seeds Anni Alicant	6	0	0	.. 6	10	0	C.
—— Coriander English	1	10	0	.. 1	16	0	—
—— Cummin	7	0	0	.. 7	10	0	—
—— Fenugreek	1	10	0	.. 1	13	0	—
Shellack	7	10	0	.. 10	0	0	—
Sticklack	6	0	0	.. 8	0	0	—
Snake Root	0	0	0	.. 0	0	0	lb.
Soap Castile or Spanish	12	0	0	.. 14	0	0	C.
Spermaceti refined	0	2	0	.. 0	0	0	lb.
Tamarinds West-India	8	10	0	.. 9	0	0	C.
Tapioca Lisbon	0	0	8	.. 0	1	0	lb.
Turmeric Bengal	5	10	0	.. 0	0	0	C.
—— China	6	10	0	.. 7	0	0	—
—— West-India	8	0	0	.. 9	0	0	—
Verdigris Wet	0	3	6	.. 0	0	0	lb.
—— Dry	0	4	6	.. 0	0	0	—
—— Crystallized	0	8	0	.. 0	0	0	—
Vitriol Roman	0	0	7	.. 0	0	0	—
—— Foreign white	2	18	0	.. 3	0	0	C.

Price of Vials per Gross.—8 oz. 70s.—6 oz. 58s.—4 oz. 47s.—3 oz. 43s.—2 oz. 36s.—1 oz. 30s.—½ oz. 24s.

OBSERVATIONS.

At recent Sales of Merchandize by Auction, Mr. J. Twemlow sold, on the 15th of July, 300 boxes Roll Brimstone, 24l. 10s. to 24l. 15s. per ton.—6 cases Ipecacuanha, 13s. to 13s. 6d. per lb.—4 cases Opium, 24s. 6d. to 25s. per lb.——Mr. E. Rodwell sold, 13 chests Turkey Gum Arabic, 31. 17s. 6d. to 7l. 15s. per cwt.—2 chests Gum Galbanum, 35l. per cwt.—2 bags 13d. to 17d. per lb.

Monthly Prices of SUBSTANCES *used in* PHARMACY,

At Messrs. SELWAY and HENLEY's (Chemical and Pharmaceutical Laboratory,) 35, Upper Mary-le-bone Street, Portland Place.

Acetum Scillæ	lb.	2s.	0d.	Cambogia opt.	9s.	6d.
Abietis Resina		2	3	Camphora	9	6
Acaciæ Gummi		2	3	Canella Cortex	3	4
——— elect.		3	3	Cardamomi Semina opt.	12	0
——— Pulvis		3	8	Cascarillæ Cortex	6	6
Acidum Aceticum	cong.	3	6	Castoreum	unc.	4	4
——— Benzoicum	oz.	6	0	Caryophilli	11	0
——— Boracicum		2	0	Cassia Cortex	8	0
——— Oxalicum	lb.	20	0	Catechu Extractum	2	3
——— Nitricum		4	6	Cetaceum	3	0
——— Nitrosum		2	6	Cera flava	3	6
——— Muriaticum		0	8	—— alba	3	0
——— Sulphuricum		0	6	Ceratum Cetacei	3	0
——— Arom.		5	0	——— Resinæ	2	8
Alcohol sp. gr. 815	M. lb.	5	6	——— Calamina	3	0
Æther sulphur. sp. gr. 789		10	0	——— Plumbi superacet.	4	0
——— rectificatus sp. gr. 744		12	0	——— Lyttæ	4	0
Ærugo	lb.	7	0	——— Sabinæ	2	8
Aloes spicatæ extractum		5	6	——— Plumbi Carb.	3	0
—— vulgaris extractum		4	6	——— Comp.	3	8
—— Barbadoes		5	0	——— Saponis	4	6
Alumen		0	4	Cinchonæ cordifoliæ Cortex (yellow)	9	0
——— exsiccatum		0	8	——— lancifoliæ Cortex (quilled)	13	0
Ammoniæ Murias Ang.		2	9	——— oblongifoliæ Cortex (red)	16	0
——— Exot.		2	2	Cinnamomi Cortex	16	0
——— Carbonas		3	6	Coccus (Coccinella)	66	0
——— Nitras		5	6	Colocynthidis	8	0
Amygdalæ Amaræ		1	6	Copaiba	7	0
——— Dulces		5	8	Colchici Radix	3	7
Ammoniacum (Gutt.)		6	6	Cornu usti	1	0
——— (Commun.)		3	6	Cretæ ppt.	0	8
Anthemidis Flores (com.)		1	9	Croci stigmata	64	0
——— (opt.)		2	0	Cupri sulphas	1	0
Antimonium		3	0	Cuprum ammoniatum	6	0
Antimonii Sulphuretum		1	0	Curcuma Pulvis	2	6
——— Aurum. Sulph.		7	0	Cusparie Cortex	4	0
——— Oxydum				Confectio Aromatica	8	6
——— Murias		3	9	——— Aurantii	2	9
Antimonium Tartarizatum		5	0	——— Opii	4	6
Aqua Anethi	cong.	3	0	——— Rosæ Gallicæ	1	10
—— Carui		3	0	——— Caninæ	2	0
——— Cinnamomi vera		18	0	——— Scammoniæ	15	0
—— Menthæ piperitæ		2	6	——— Sennæ	2	0
——— pulegii		2	6	——— Amygdalæ	5	0
——— Sativæ		2	6	Emplastrum Ammoniaci	8	0
—— Pimentæ		2	9	——— Cumini	2	0
—— Rosæ		5	0	——— Galbani Comp.	2	6
—— Cassiæ		3	6	——— Lyttæ	6	6
Arsenici Oxydum	lb.	1	0	——— Opii	2	6
Argenti Nitras		6	9	——— Plumbi	1	6
Assafœtida Gummi-resina		6	9	——— Resinæ	1	6
Aurantii Cortex		2	6	——— Roborans	2	0
Balsamum Peruvianum		33	0	——— Saponis	2	6
——— Tolutanum		15	0	——— Hydrargyri	2	6
Barytæ Murias		6	0	——— cum Amm.	6	0
Benzoinum elect.		11	0	Extractum Anthemidis	unc.	1	0
Bismuthum		3	0	——— Belladonnæ	1	0
——— Oxydum		16	0	——— Cinchonæ	3	0
——— Nitras		16	0	——— resinos.	4	0
Calamina præp.		0	3				
Calumbæ Radix		2	6				
Calx		1	0				

Extractum Colocynthidis	2*s.*	0*d.*
——— comp.	1	0
——— Conii	0	6
——— Gentianæ	0	5
——— Glycyrrhizæ .. lb.	3	0
——— Cascarillæ .... unc.	3	0
——— Hæmatoxyli	0	5
——— Humuli	0	9
——— Hyoscyami	1	0
——— Jalapæ 1*s.* 6*d* Res.	2	8
——— Opii aquos	3	8
——— resinos	3	0
——— Papaveris	0	6
——— Rhæi	2	4
——— Sarsaparillæ	0	10
——— Taraxaci	0	6
Ferri carbonas lb.	1	2
—— sulphas	1	0
Ferrum Ammoniatum	3	6
——— Tartarizatum	4	0
Galbani Gummi-resinæ	7	6
Gentianæ Radix	1	3
Guaiaci Resina	8	0
Hydrargyrus purificatus	5	6
——— cm Creta	4	0
Hydrargyri Oxymurias	8	0
——— Submurias	8	6
——— Hydros.	10	0
——— Nitrico-Oxydum	8	6
——— Oxydum Cinereum	16	0
——— Rubrum	5	0
——— Sulphuretum Nig.	3	6
——— Rub.	8	0
——— Præcipitatus Alb.	8	0
Hellebori nigri Radix	2	6
Ipecacuanhæ Radix	20	0
——— Pulvis	21	0
——— Compos. Pulv. lb.	8	0
Jalapæ Radix	6	0
——— Pulvis	6	6
Kino	12	0
Liquor Plumbi Acetatis M. lb.	1	0
——— Ammoniæ .... P.L.	2	8
——— Arsenicalis	3	0
——— Potassæ	0	9
——— Vol. Corn. Cerv.	1	3
Linimentum Camphoræ comp.	5	6
——— Saponis comp.	5	6
Lichen Islandicus ..... P. lb.	1	9
Lini Semina	0	6
—— Pulvis	0	4
Lyttæ	13	0
Magnesia	8	6
——— Carbonas	3	0
——— Sulphas	1	3
Manna optima	7	6
——— communis		
Mel Rosæ	2	6
—— Despumat	3	0
Mices Moschatæ	25	0
Moschus pod, 24*s.* in gr. unc.	40	0
Mastiche lb.	5	6
Myristicæ Nuclei	25	0
Myrrha elect.	6	6
Olibanum	3	0
Opoponax	23	0
Opium (Turkey)	34*s.*	0*d.*
Opium (East India) ..... lb.	32	0
Oleum Amygdale ..... lb.	3	9
—— Anisi ..... unc.	2	6
—— Anthemidis	5	0
—— Cinnamomi Cassiæ	8	6
—— Caryophili	5	0
—— Cajuputi	8	0
—— Carui	1	3
—— Juniperi	0	9
—— Lavandulæ	4	0
—— Lini ..... cong.	8	6
—— Menthæ piperitæ unc.	4	6
——— viridis	3	0
—— Olivæ opt. cong.	30	0
——— secundum	18	0
—— Origani ..... unc.	2	0
—— Pimentæ	4	6
—— Ricini optim. (per bottle)	10	0
——— secund.	7	0
—— Rosmarini ..... unc.	0	9
—— Succini .. 2*s.* 4*d.* rect.	2	6
—— Sulphuretum ..... lb.	1	6
—— Terebinthinæ rectif. ..	2	0
Oxymel Scillæ	3	0
Papaveris Capsulæ (per 100)	2	4
Plumbi Carbonas ..... lb.	0	8
——— Superacetas	2	2
——— Oxydum semi-vitreum	0	6
Potassa Fusa ..... unc.	0	6
——— cum Calce	1	6
Potassæ Nitras ..... lb.	1	0
——— Acetas	8	0
——— Subcarbonas	1	2
——— Carbonas	4	6
——— Sulphas	1	0
——— Sulphuretum	1	6
——— Supersulphas	3	0
——— Tartras	3	0
——— Supertartras	2	0
Pilulæ Hydrargyri	6	0
——— Aloes comp.	8	0
——— cum Colocynth.	16	0
——— Saponis cum Opio ..	18	6
——— Scillæ Compos.	6	6
——— e Styrace	48	0
Piper longum	2	6
—— Nigrum ..... lb.	2	6
Pimento ..... lb.	2	6
Pulvis Aloes cum Canella ..	6	6
——— Compositus	10	0
——— Antimonialis	7	0
——— Cinnamomi Comp. ..	16	0
——— Cornu cervi cum Opio	16	0
——— Cretæ Composit.	8	0
——— cum Opio	9	0
——— Kino Compositus	12	0
——— Scammoniæ Comp. unc.	2	6
——— Sennæ Composit. .. lb.	8	0
——— Tragacanthæ Comp. ..	5	0
Resina Flava	0	5
——— Nigra	0	5
Rosæ Folia	10	6
Ras Quassiæ	1	6
Rhæi Radix (Russia)	30	0
——— (East India)	14	0

Rhæi Radix Pulvis	15s.	0d.
Sapo (Spanish)	2	6
Sarsaparilla Radix Inc.	5	0
Scammoniæ Gum-Resina unc.	2	6
Scilla recens	1	3
—— siccata	5	0
—— pulvis	6	0
Senegæ Radix		
Sennæ Folia Opt. Alexand.	6	6
Serpentariæ Radix	30	0
Simarobæ Cortex	4	0
Sodæ Boras	4	6
—— Carbonas	1	0
—— Subcarbonas	1	4
—— exsiccata	2	8
Sinapis super.	2	6
—— secund.	2	0
Sodæ Sulphas	0	8
—— Phosphas	2	8
—— Acetas unc.	0	10
Soda tartarizata lb.	2	4
Spongia usta unc.	1	3
Spiritus Ammoniæ M. lb.	4	0
—— aromaticus	4	6
—— fœtidus	3	6
—— succinatus	4	6
—— Cinnamomi ver.	3	6
—— Juniperi Compos.	3	0
—— Lavandulæ	4	6
—— Compos.	5	0
—— Myristicæ	3	0
—— Pimentæ	3	0
—— Rosmarini	3	6
—— Ætheris Aromaticus	6	0
—— Compositus	6	0
—— Nitrici sp. gr. 860	5	6
—— Sulphurici	6	0
—— Vini rectificatus	28	0
Syrupus Aurantii	1	8
—— Rutæ	1	8
—— Papaveris	2	0
—— Violæ	2	10
—— Rhei	2	10
—— Rhamni	2	0
—— Croci	3	0
—— Tolutanus	2	0
—— Rheados	2	0
—— Mori	2	6
Sulphur	0	6
—— Lotum	1	0
—— Præcipitatum	1	0
Tamarindus opt.	2	6
Terebinthina Vulgaris	0	9
—— Canadensis	8	0
—— Chia	6	0
Tragacantha Gummi	10	0
—— Pulvis	10	6
Tinctura Aurantii M. lb.	3	9
—— Aloes	4	0
—— Composita	9	6
—— Assafœtidæ	5	6
—— Balsa. Tolut.	5	6
—— Benzoini Comp.	6	9
—— Camphoræ Comp.	4	0
Tinctura Cardamomi	4s.	0d.
—— Comp.	4	0
—— Calumbæ	3	9
—— Capsici	3	9
—— Cascarillæ	4	6
—— Castorei	7	0
—— Catechu	4	0
—— Cinchonæ	6	0
—— Compos.	6	0
—— Cinchonæ Ammon.	7	0
—— Croci	6	6
—— Digitalis	4	6
—— Ferri Ammoniati	4	8
—— Cinnamomi	4	6
—— Comp.	4	6
—— Gentianæ Comp.	4	0
—— Guaiaci	6	0
—— Ammon.	6	0
—— Hellebori Nigri	4	6
—— Humuli	5	0
—— Hyoscyami Nig.	4	6
—— Jalapæ	4	6
—— Japonica	4	6
—— Ferri Muriatis	4	8
—— Kino	5	0
—— Lyttæ	3	9
—— Myrrhæ	4	6
—— Opii	7	0
—— Camphorat.	4	6
—— Quassiæ	3	9
—— Rhei	4	6
—— Comp.	4	0
—— Scillæ	4	6
—— Sennæ	4	9
—— Serpentariæ	6	0
—— Valerianæ	5	6
—— Amm.	4	6
—— Zingiberis	5	6
Valerianæ Radix	1	8
Veratri Radix	1	6
Unguentum Hydrargyri fort	5	4
—— Mit.	3	0
—— Nitratis	3	3
—— Nitrico-oxy.	2	9
—— Sulphuris Comp.	1	9
—— Sambuci	2	0
—— Virio	1	8
—— Altheæ	2	0
—— Cetacei	3	6
—— Veratri	1	8
—— Zinci	2	0
—— Hyd. præcip. Alb.	3	0
—— Picis	1	6
Uvæ Ursi Folia	2	4
Vinum Aloes	3	6
—— Antimoniale	3	0
—— Ferri	3	6
—— Ipecacuanhæ	5	6
—— Opii	8	0
Zinci Oxydum	4	6
—— Sulphas purif.	2	0
—— Acetas unc.	1	6
Zincum lb.	1	6
Zingiberis Radix opt.	2	4

French Leeches, equal to English, 25s. per hundred, or 3s. 6d. per dozen.—English ditto, true, 12s. per dozen.—Essential Salt of Lemons, 4s. 6d. per dozen.

METEOROLOGICAL REGISTER.

From June the 25th, to July the 25th, 1814.

Kept by C. BLUNT, Philosophical Instrument Maker, No. 38, Tavistock-Street, Covent-Garden.

Moon.	Day.	Wind.	Barometrical Pressure. Max.	Min.	Mean.	Temperature. Max.	Min.	Mean.	
	26	NW	30·08	30·08	30·08	59	48	53·6	Cloudy Small Rain
	27	N	30·05	30·—	30·03	61	49	54·6	Clear
	28	NW	29·98	29·93	29·945	68	50	58·6	Fair
	29	NW	29·91	29·89	29 897	73	51	61·3	Fair
	30	NW	29·94	29·92	29·932	71	53	62	Fair
	1	NW	29·90	29·88	29·885	72	51	61·3	Fair
○	2	NW	30 01	29·94	29·992	72	52	62	Fair
	3	NW	30·13	30·—	30·042	73	56	64·3	Fair
	4	NW	30·05	30·04	30·042	74	57	64·6	Fair, Rain during the Night
	5	NW	30·05	30·03	30·04	73	58	64·3	Fair
	6	NW	30 05	30·04	30·045	73	59	64·3	Fair
	7	NW	30 04	29·93	29·975	74	57	63 6	Rainy
	8	W	29·93	29·83	29·82	75	61	65	Rainy
	9	W	29·83	29·74	29 827	74	61	67	Rainy
◑	10	W	29 73	29·68	29·705	73	58	65	Showery
	11	W	29·93	29 90	29·907	72	58	63·6	Rainy, very heavy Showers
	12	NW	30·06	30·01	30·047	73	56	63 6	Fair
	13	NW	30·07	29·95	30·—	70	56	62·3	Fair
	14	NW	29 83	29 76	29·935	71	57	63·6	Fair
	15	W	29 76	29·73	29·987	70	56	62	Fair
	16	N	29 80	29·64	29·982	72	58	63·3	Fair
◔	17	SW	29·86	29·84	29·85	71	55	62·3	Fair
	18	W	29·89	29·86	29·882	69	54	61	Fair
	19	NW	29 83	29·83	29·857	70	56	62	Fair
	20	W	29·70	29 67	29·685	71	55	62 6	Fair
	21	SW	29·84	29·73	29·802	74	56	64·3	Fair
	22	W	30·08	29·87	29·995	75	57	65·3	Fair
	23	SW	30·20	30·18	30·195	76	57	66·3	Fair
◐	24	SW	30·14	30·—	30·07	79	58	67·6	Fair
	25	SW	29·78	29·74	29 26	83	58	69·6	Fair

RESULTS.

Mean barometrical pressure 29·9237		Mean temperature	63·03 deg.
Maximum 30·20	wind at SW	Maximum 83,	the wind at SW
Minimum 29·64	——— N	Minimum 48,	——— NW

Scale exhibiting the prevailing Winds during the Month.

N	NE	E	SE	S	SW	W	NW
2	0	0	0	0	5	8	15

	Mean barometrical pressure.	Mean temperature.
From the full moon on the 2d July, to the last quarter on the 10th	29·96	65·83
——— last quarter, to the new moon on the 17th	29·937	63·34
——— new moon, to the first quarter on the 24th	29·899	63·—

Measles,

Measles, hooping-cough, scarlatina anginosa, and small-pox, are the prevailing epidemics of the season. Some cases of synochus have occurred, and diarrhœa and bilious affections are not uncommon. At the Asylum for Female Orphans, some cases of small-pox after vaccination have very recently appeared, but of a very mild sort, and attended with little indisposition, though in some of the children there was a pretty good crop of pustules.

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In short our future pages, in every department, will testify that our attention to the interests of our most numerous and respectable friends and correspondents increases with their daily increasing numbers, and will amply repay the patronage by which this Journal is distinguished.

August 1, 1814.

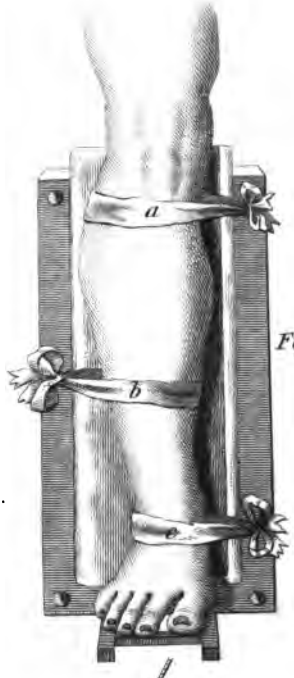
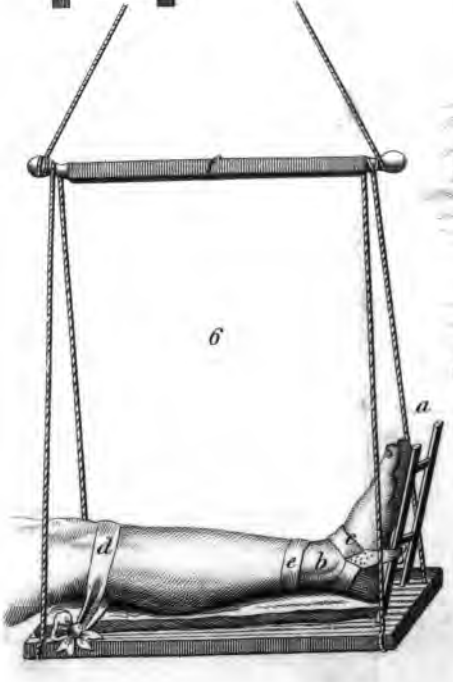


Fig. 1.



J. Pass. sculp.t sub London Road

THE
Medical and Physical Journal.

3 OF VOL. XXXII.] SEPTEMBER, 1814. [NO. 187.

"For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work to which the faculty in EUROPE and AMERICA were under deeper obligations than to the Medical and Physical Journal of London, now forming a long, but an invaluable series."—RUSH.

For the Medical and Physical Journal.

Description of a new Mode of treating Fractures of the Extremities, from the German of Mr. Sauter; by Mr. WANT.

THE apparatus consists in a board suspended from the bed by cords fixed to the four corners. The fractured limb rests upon this. The leg is fixed to it in three places: first at the knee, then to a frame at the foot, which we shall denominate the foot-board, and the bones are kept in contact by a band at the fractured part, which is fastened to one side of the board. The limb is uncovered and *unincumbered* during the cure, and, once reduced, the apparatus never requires to be altered; the patient may sit and raise himself without in the slightest degree deranging the fracture, which can be daily examined without removing the bandage. In compound fractures which require daily dressing, the importance of this method is inconceivably great. The case which led Mr. Sauter to conceive this plan, was an oblique compound fracture, three inches above the malleolus internus. The superior fragment was completely denuded, and projected an inch from the wound. At every movement of the leg the blood jutted out; the foot was drawn outwards and upwards; the fibula was separated from the tibia; the interosseous ligament was ruptured, and the soft parts were much injured. The fracture was dressed five times in the usual manner; but, notwithstanding the splints and compresses applied in various ways, at every dressing the upper extremity of the tibia was found still projecting from the wound. The limb was erisipelatous, plyctenæ had formed, and the convulsive movements were occasionally so strong that tetanus was apprehended. From the moment this machine was applied, the fractured bones were kept in close contact, and the patient recovered in six weeks.

The machine varies according to the limb fractured, but its mechanism is always the same; that which belongs to fractures of the leg is the most simple, and serves as the

basis of the others. It consists in a board of soft wood, 2 feet long by 10 inches wide. (See Fig. 9.) At each angle a hole (*b*) is made for ropes, by which it is to be suspended. At one end two mortises (*c c*), 4 inches distant from each other, to receive the tenons of a frame for supporting the foot. These mortises are in a slightly oblique direction, to give an inclination of about 105 degrees to the foot-board, and several of them may be made at small distances from each other, for the convenience of adapting the machine to limbs of different lengths. An oval hole is made anterior to the foot-board for the heel to rest in.* The frame for supporting the foot is made of two upright pieces of firm wood, 11 inches long and three-quarters of an inch thick; these are connected together by two cross bars. The whole is suspended from the ceiling of the bed by means of two cords, each about 6 feet in length. The two extremities of one of them are passed into the holes (*b b*) of the upper end of the board, Fig. 9. The same is done with the other cord at the other extremity; each cord is then fastened at the middle to the end of a stick of the same length as the board, and from the ends of this stick other cords are passed, by which it is suspended to the ceiling, as may be seen in the Plate.

The bed on which the patient is placed, should be so arranged as to have *nothing beneath* and at the sides of the board which can impede its movement; and the fractured limb should be on a level with the body. In hospitals one may be kept for the purpose. It is merely necessary that the fourth of a mattrass should be removed on the side of the fractured extremity, and of course the lower portion. Where these are not at hand in private families, it will not be difficult to contrive the making of the bed so as to answer the same intention.

It is scarcely necessary to go into minute detail respecting the manner of preparing the bandages, or the pads which must necessarily be placed on the board upon which the fractured limb is to be confined. It will be recollected, that the bandages must be sufficient to keep up a *permanent* extension; and the pads are intended to afford a bed sufficiently easy on which the leg may rest during the progress of the

*. If the tenons of the frame were made of some firm material, as steel, they might be reduced considerably in diameter, by which means the distance between the mortises could be much lessened, and less chance given of shortening of the limb. There seems to be no great necessity for the hole intended for the heel to rest in, as the arrangement of the padding may supply its place.

cure, and which must be so arranged as to fill up the inequalities of the under surface of the limb.

The application of the machine will be obvious from the accompanying Plate. The knee should first be firmly fixed to the upper extremity of the board, the foot should be bound to the frame, and the bands of direction must be loosely applied. When the foot is fixed, the extension is to be made when the limb is brought to its original length, the tenons of the frame are to be fixed into the mortises, the limb will then be kept in a state of permanent extension without the possibility of shortening; the bands of direction must then be applied according to the circumstances of the case.

EXPLANATION OF THE PLATES.

Fig. 1.—This figure gives the most simple idea of the bands of direction. The author was called to a fracture twenty days after it had happened. The muscular action had drawn the foot outwards, leaving the limb concave outwardly and convex on the opposite side; by means of the apparatus, and the middle band of direction (*b*), the limb was made perfectly straight.

Fig. 2.—An oblique fracture of the bones of the leg, the superior fragment of which had pierced the integuments.

Fig. 3.—The same fracture with the apparatus applied.

a, The band of extension.

b, Assists the foregoing, and draws the lower fragment inwards.

c, The superior band of direction.

d, The band of direction applied near the fracture, which acts in a direction opposite to the two former.

e, The wound.

f, Another band of direction, to confine the lower fragment which jutted forwards.

Fig. 4.—The leg of a young man after being ten weeks broken, under the care of an unskilful surgeon. The limb remained curved, as is represented in the Plate. At first it was a simple fracture, but from the mismanagement of the surgeon, a considerable ulceration took place, with caries of the bone. It is not necessary to relate the whole particulars of the case, but it shews in a striking manner the utility of our author's practice, where splints could not have been applied on account of the wound and exfoliating bone.

Fig. 5.—The manner of applying the bandages to the foregoing case.

Fig. 6.—The machine applied to the leg, with the bandages for extension and direction.

a, The frame or foot-board.

b, The wound caused by the projection of the fragment.

c, The band of extension, which in this case is attached only to the internal part of the frame.

d, The superior band of direction, which should operate on the same side as the band of extension.

e, The middle band, which ought to act in a direction contrary to the two former; to draw the upper portion of the fractured bone against the lower, and keep them in contact.

f, The stick to which the cords are fastened.

Fig. 7.—The machine applied to a compound fracture of the arm.

f, Two wounds near the joint, from which a fragment of carious bone was removed.

Fig. 8.—The application of the machine to the thigh.

Fig. 9.—The board on which the limb is placed.

b, The angles where the suspending cords are fixed.

c, Mortises, to be increased in number according to circumstances.

d, Grooves for the bands of direction.

e, Foot-board or frame.

For the Medical and Physical Journal.

On the altered Specific Powers of Vaccine and Variolous Matter; by Dr. KINGLAKE.

EVERY friend to humanity must have experienced the highest gratification in having borne full testimony to the anti-variolous power of vaccine matter. It has now had the benefit of ample trial, and has been considered and reconsidered with all the acuteness of criticism that its important pretensions merited. It has completely justified all that was affirmed of its powers by the respectable person who first introduced it to public attention. It indeed but rarely happens that commendation so fully warrants itself as that which has been justly bestowed on the preventive efficacy of vaccine against variolous infection. This proves that it was not ushered into public notice on equivocal grounds, but on the authority of correct observation of its powers; and it farther evinces that it will abide the test of all farther investigation that may be made concerning it. Professing then, as it unquestionably does, adequate anti-variolous power in its genuine state, it becomes an object of high importance to secure to it unimpaired, both in reality and in reputation, these inestimable properties. It is with a view to realise this advantage, that it seems to me as expedient to submit a few observations on what appears to me to be an altered or degenerated state of vaccine matter.

It has within these few years happened to me, in numerous instances, to have known the impossibility of imparting the vaccine disease by inoculation, and some cases have occurred to me in which an incomplete and an inadequate infection for the intended purpose was given. This insufficiency and these failures appear to me to be justly referable to a deteriorated

riorated state of the vaccine fluid from having repeatedly undergone the vital actions exerted on it in the human system. It is reasonable to suppose that in the way of attenuation or exhaustion of the specific property of vaccine virus, it must undergo changes by being indefinitely transferred from one individual to another; and, if this actually takes place, it then ceases to be the preventive agent against a formidable disease, that has gained it so much confidence and fame. It is indeed difficult to conceive how any fluid can be so indestructably arranged as for ever to resist the decomposing influence of the chemico-animal actions to which it may be subjected, and to which vaccine matter is actually exposed. There may be a power of resistance insuring its specific arrangement during a long period in performing its preventive services against the variolous disease; but the extent of this period is imaginary, and its probable termination can only be inferred from its ceasing to act specifically when it has been employed in a protracted series of inoculations. The mass of evidence extant on the preventive efficacy of the vaccine fluid against the small-pox is most consoling, but it is not so satisfactory to be aware that, if the specific powers of the disease were not fully exerted, the security might not be as lasting as expectation; that, although a temporary insusceptibility for variolous disease might be induced, yet that it has not sufficiently identified itself with the system to be a permanent preventative. Not a year elapses but persons of limited opportunities for learning the events of vaccine inoculation hear of failures of the vaccine disease in securing against the infection of small-pox. Many of these reputed failures, it must be owned, cannot be satisfactorily verified on inquiry, yet the whole cannot be fallacious; and it would appear that instances enough have occurred fairly to impugn the infallibility of vaccine efficacy.

My opinion on this subject is, that the vaccine fluid is too long used in the human system without renovating it from the cow, which, being its genuine source, must be supposed to yield it in its most efficient specific powers. Why then not frequently resort to the animal that, by a morbid action peculiar to its nature, furnishes the desired preservative? The dairy districts are often affording natural instances of the disease; and, if this opportunity did not offer with sufficient regularity, would it not be practicable always to reserve a portion of the immediate vaccine fluid with which to infect a cow, so that it may be thus genuinely supplied as occasion might require? Does vaccination directly from the cow produce a more violent disease than when it is transferred from one subject to another? If so, the security against small

small-pox would probably be proportionately great, and yet the higher degree of the disease would not be accompanied with any calculable risk of life. The disease, as contracted from the infected cow, is I believe usually attended with general eruptions over the skin; but to my knowledge it is not on record that it has in any instance proved mortal. This being the case, it behoves, in my judgment, the advocates for the real benefit and permanent reputation of vaccine inoculation, to go to the cow very often for a fresh supply of genuine fluid, in which could not fail to be found those unaltered specific powers on which its preventive efficacy against small-pox depends. Either recourse should be had to the cow in every instance, or, consistently with the motive for doing so, the same matter should not be re-inoculated perhaps more than six times. To that extent no diminution of power may probably be sustained; but this is a question that can only be absolutely set at rest by uniformly recurring to the animal that has originated the morbid fluid.

That the vaccine fluid undergoes some change by long-continued inoculation, derives support from the notorious fact that, since the comparative discontinuance of inoculation for the small-pox, the variolous fluid, from being almost entirely furnished by natural cases, is found on being employed in inoculation to induce a much more virulent disease than when the frequency of the practice caused it to be transferred from one inoculated subject to another, by which the matter was probably rendered more mild than when it resulted from the natural form of the disease, so as to impart to the inoculated small-pox a morbid character almost free from calculable risk. This is a reason why a partial indulgence of inoculation for the small-pox becomes a public evil, by subjecting to hazard the lives of those who under a more general practice would have to undergo a comparatively mild and safe form of the disease. The prohibition of variolous inoculation, therefore, by a suitable legal enactment, would be imposing a wise, humane, and beneficial restraint, which, aided by the anti-variolous efficacy of the vaccine disease, would afford a reasonable prospect at no distant time of altogether exterminating the small-pox. Inoculation for the small-pox keeps the disease always in action, and by subjecting persons to casual infection, has proved rather a scourge than a benefit to mankind, in as far as the deaths resulting from the frequency of the natural disease, owing to inoculation, are held to have exceeded the average amount of mortality from that disease occurring for any given period previously to the introduction of variolous inoculation.

The extinction of the small-pox is an object worthy of the best

best endeavours of humanity, and assisted by the most efficient mode of applying the preventive powers of the vaccine fluid, it may be justly regarded as an event fairly within the scope of rational expectation.

Taunton, ROBERT KINGLAKE.
July 25, 1814.

For the Medical and Physical Journal.

On the Discrepancy of Medical Opinions; by Mr. WOODHAM.

WHEN we take a survey of the opinions of medical men, not only with respect to the theory, but, what is of the last importance, the treatment of diseases, we cannot fail to be struck with their discrepancy, but also with astonishment that men, from similar premises, should draw conclusions so directly opposite. It is a phenomenon in the history of the human mind, which would *à priori* be considered impossible. We need, however, only mention the opinions and practice of a few of the moderns, and these too of deserved reputation, to prove the truth of our assertion.

Cullen and Fordyce, names dear to most of the profession, maintain fever to be a disease of the whole system, recommend bleeding and purging in the most guarded manner, and rely for the cure principally on antimonials, to which they were both much attached. Dr. Clutterbuck and Dr. Beddoes consider fever as a symptom of organic inflammation. The former states this inflammation to be in the brain; the latter in some abdominal viscus. Both recommend free bleeding, generally and locally, together with active purgatives, which they regard as the chief remedies. Darwin and Currie, men of great talents, the former of whom was for many years in extensive practice, treated typhus with small doses of bark, opium, and wine; to which the latter added cold affusion. Dr. Parr, and Dr. Hamilton of Edinburgh, advise active purgatives only. Rush and his adherents assert that the yellow fever is not contagious, and a disease of high inflammation; while others of equal eminence maintain that it is contagious, and a disease of great debility. Fordyce and Dr. Haygarth recommend bark for the cure of acute rheumatism: the former says, metastasis used frequently to occur when he employed bleeding, but after he gave bark, which he did for some years previously to his death, he seldom lost a patient. Dr. Sutton, the latest writer on this disease, condemns the use of bark, advises bleeding freely, purgatives, refrigerants, and cold lotions to the joints. The generality of practitioners, in most pectoral complaints, advise

advise the wearing of flannel, and recommend a temperature of a regular warmth, and which last has been much insisted on by Dr. Buxton;—Dr. Sutton before-mentioned, on the contrary, regards flannel as highly injurious, and orders cold lotions to be applied to the chest. Most surgeons consider the action of the capillary vessels to be increased in inflammation; Dr. Lubbock, Mr. Allen, and Dr. A. P. Wilson, say that is diminished; while Dr. Thompson, the Professor on Military Surgery at Edinburgh, maintains that it is sometimes increased and sometimes diminished. Sir James Earle, and the majority of surgeons, employ cold applications, or applications producing cold, in the inflammation consequent to burns; Mr. Kentish and some others use stimulating remedies, such as Ol. Terebinth mixed with Ceratum Resinæ. From the time when Cullen first published his Nosology, and Bell his Treatise on Ulcers, local diseases were for the most part, till within these few years, considered as requiring topical remedies only; Mr. Abernethy, a gentleman no less distinguished for his profound knowledge of anatomy than his great skill in surgery, believes them to have a constitutional origin, a disordered state of the digestive organs, and to the correction of which state the attention should be almost solely directed.

These are a few of the numerous discordancies existing among medical men. I have not enumerated them with a view to excite a spirit of scepticism or disgust, but to show young men about to enter on their practical career, the absolute necessity of thinking and observing for themselves.

West Smithfield, JAMES WOODHAM.
August 4th, 1814.

For the Medical and Physical Journal.

Singular Case of Recovery, after the Loss of a considerable Portion of the Brain; by Mr. ROBERT HARRUP, Surgeon.

JAMES HAMPTON, a boy between six and seven years of age, was brought to me, on Saturday morning the 15th of May, 1813, with a wounded head. His mother gave the following account of the accident:—That yesterday afternoon a lad in play threw a stick, which, glancing from an arch, struck him on the left side of the forehead. That he was stunned for some time, and vomited and retched at intervals for several hours, which caused a great effusion of blood from the wound, as well as a quantity of *thick matter.* That with much difficulty she at last succeeded in stopping the violence of the bleeding, by binding handkerchiefs around his

his head; but it still continued to come from under the clothes in drops which ran down his face. He had passed a restless night, with frequent starting and screaming.

When I saw him he was much heated, having *walked* the distance of two miles at a hurrying pace. Upon removing the handkerchiefs, a portion of the brain, as much as would have filled a large tea-spoon, lay upon that which was in immediate contact with the wound; and about half the quantity issued from the opening. His mother observed, "that is the sort of *matter* which came away last night." Being asked in what quantity, she replied, about as much as would have filled a small tea-cup. The wound was situated on the os frontis, near the sutura coronalis, some inches from the left eye-brow. The opening through the bone was circular, somewhat more than an inch in diameter. The brain here pulsating with great violence, forced out small portions of itself every instant, with a considerable quantity of bloody serum. The surrounding depression of the cranium sufficiently confirmed the assertion of the mother, that a small tea-cupful of the brain had been lost the preceding evening. Lint was applied to the opening, covering it with a slice of dry spong, which was retained by a bandage drawn moderately tight. His mother was directed to *carry* him home, and to put him to bed immediately. The antiphlogistic regimen was strictly enjoined.

Sunday, 16th.—Passed a restless night, frequently starting and screaming; pulse 112; no motion for two days past.

℞. Pulv. Jalap. ℈j. s. statim et rep. ℈tia quaque horâ donec alvus respond.

Monday, 17th.—Symptoms same as yesterday. No evacuation by the bowels. Habeat quam primum Pulver. Jalap. gr. x. Calomel. gr. v. Pulver. Zingiber. gr. iii. M.

Tuesday, 18th.—Physic operated copiously three times; is much better this morning; slept well in the night; appetite good; pulse 100; wishes to get up; brought down stairs, and sat up without any uneasiness while the wound was dressed; healthy appearance around the edges of the wound; pulsation of the brain much diminished, some portion of which came away on the lint; discharge profuse; little or no complaint; dressed as before; intellect uninjured; pupils not affected, nor any other bad symptom present.

Thursday, 20th.—Continues better since last report; found him sitting up by the fire apparently in health; wound of a healthy appearance; discharge moderated; in the centre a portion of the brain of a conical shape projects, which pulsates slightly; extracted, from this part, a splinter of bone,

which brought with it a portion of the brain about the size of a large pea, without the patient once complaining.

Monday, 24th.—Has continued better since last report till last night, when he waked frequently with starting and screaming; pulse 100, and somewhat full; appetite good; bowels regular; wound dressed this morning; has discharged a great quantity of well-digested pus; looks healthy; only about the size of a large pea of the brain to be seen, which pulsates more than before; the other parts of the opening filled up with healthy granulations.

Tuesday, 25th.—Found the little patient out of doors this morning, who rested well last night; bowels regular; as the wound had discharged considerably last night, dressed it again this morning; brain pulsating violently, by which a quantity of thin yellowish fluid is thrown out.

Thursday, 27th.—Still a considerable discharge from the aperture, although in a healing state; considerable pulsation.

Saturday, 29th.—Wound closing fast; discharge much diminished.

Monday, 31st.—Same as last report.

Wednesday, June 2d.—Last night fell head-foremost over a wall about five feet high, by which he was rendered sick and faint for some hours. Slept well afterwards during the night, and seems to have quite recovered this morning; wound continues to heal.

Friday, 4th.—On dressing the wound this morning, found a black hard substance on the lint, which proves to be a piece of wood, about a quarter of an inch in length, and half as wide. Two more pieces about the same size were extracted from the small opening in the centre of the wound, without the patient experiencing any pain.

Sunday, 6th.—In other respects the same as at last report.

Tuesday, 8th.—The pulsation entirely ceased.

Thursday, 10th.—Some small degree of pulsation; did not rest well last night, and had no appetite for breakfast this morning.

Sunday, 13th.—Extracted another rugged and angular piece of wood, about the size of a large pea; slight degree of pulsation.

Tuesday, 15th.—Extracted two more pieces of wood, which were firmly imbedded in the granulations.

Thursday, 17th.—Wound somewhat black in the centre, probably arising from another piece of wood approaching the surface.

Sunday, 20th.—Extracted another piece of wood from the centre of the wound, somewhat larger than any of the former.

Friday, 25th.—The granulations, which have for some

time

time past been much higher than the surrounding skin, are now much reduced in consequence of a blow he received on the part yesterday.

From this time nothing particular occurred. The wound was firmly cicatrized on Tuesday August 17th, leaving a very considerably depression.

This boy had the measles severely the latter end of June last. He is now in perfect health. The depression in the skull is much shallower. After taking hard exercise, a pulsation is still very perceptible through the integuments of the part injured. ROBERT HARRUP,

Chobham, August 6, 1814.

For the Medical and Physical Journal.

On Phlegmasia Dolens; by FRANCIS MOORE, M.D. of Ipswich.

PHLEGMASIA DOLENS, though not a disease of frequent occurrence, is very distressing to the patient, and perplexing to the physician. Until within a few years, it has not been particularly designated and treated of by medical writers. And a great diversity of opinion still subsists among these writers of the proximate cause of the disease.

An interesting case which lately occurred in my own practice, together with an acquaintance with several others which took place in my neighbourhood, have induced me very particularly to consider the symptoms and progress of the disease, with an endeavour to a more satisfactory explanation of its existing and proximate cause, whereby to regulate the method of treatment. I shall relate two cases.

The first was that of a lady of slender and delicate constitution, aged thirty. A few days succeeding parturition, (which was natural, of short duration, and unattended with any peculiar symptoms,) complained of pain in her right side, hip, and back, accompanied with slight rigors and watchfulness. An opiate and antimonial were taken at bedtime, which allayed the pain, and procured sleep.

As the disease progressed she experienced a rigidity and soreness of the abdominal muscles and integuments of that side, attended with a difficulty of moving the lower limb and pains extending to the knee, and at other times to the calf of the leg. The pulse was but little increased in frequency, and but a slight degree of thirst, the tongue perfectly clear. From a knowledge that she had frequently before been affected with rheumatism, I continued the antimonials, with the occasional administration of cathartics and the application of

fomentations, by means of an infusion of bitter herbs inclosed in flannel.

These means proving inefficacious, I had recourse to bark and guaiacum, and kept up a constant irritation on the thigh by blisters, applying another as soon as the first dried. This course evidently increased the local affection. The upper part of the thigh, the inguinal glands, and right iliac region, became more tumefied, which gradually extended to the hypogastrium and labium pudendi.

In the early stages of the swelling, it appeared in ridges and bunches, occasionally assuming a livid, and at other times a purple hue. As it advanced, it appeared more uniformly diffused, exceedingly tender to the touch, hotter than natural, shining, but not much discoloured.

The symptomatic fever which had from the beginning kept pace with the local affection, was now much increased, the pulse small and very frequent, and the thirst considerable. The swelling gradually increased, and the patient, in addition to the other symptoms, sometimes experienced a numbness in the diseased part. With an intention of rousing the action of the absorbents, a volatile stimulating liniment was applied, and in turn hot vinegar; but these had no better effect than blistering.

With the advice of an experienced and highly respectable practitioner, I tried digitalis with a view to its diuretic operation; but, as it failed to produce this effect, and increased the debility, I laid it aside.

During the advanced stages of the disease, the inflammatory appearances became more evident, the pain, heat, soreness, and redness increased, until discharge took place from a ruptured lymphatic in her side, the orifice was about the size of the head of a common pin, situated about an inch from the inferior spinous process of the os ilium.

The fluid discharged on the first day exceeded a pint, resembling a mixture of pus and lymph, its consistence a little thicker than milk, of a pale yellow colour, a little inclined to a faint green, and perfectly inodorous, readily coagulating by admixture with muriate of ammonia, and imperfectly by heat, but not by dilute sulp. acid; specifically heavier than water, and subsiding to the bottom of the vessel, without mixing in any degree; on agitation, uniformly diffusing itself, and producing a milky appearance. The strength of the patient was supported by bark and wine, and the discharge promoted by a wheat-bran poultice.

On the second day the tumour was reduced to one-third of its original size, and the pain and uneasiness had completely subsided. I ordered the vol. liniment to be applied to the remaining

remaining hard places, and the continuance of the poultice. Half an hour after, a disagreeable feeling at the stomach and a disposition to fainting ensued: on wiping off the liniment these symptoms passed off.

On the third day a disposition to fainting again occurred, preceded by a disagreeable feeling at the stomach and coldness of the extremities, and accompanied with a creeping and otherwise indescribable sensation along the course of the spine, to near the first or second true rib. To these symptoms succeeded an increased heat and considerable thirst, with a small and frequent pulse.

Suspecting that the sensation experienced along the spine, being in the course of the great lymphatic trunk, might be occasioned either by the absorption of some of the confined matter, or by the sudden determination of the fluids to their natural channel, I examined the side and found the orifice partially closed, which I opened, and by pressure evacuated half a pint of matter resembling that before described. My patient observed she felt relieved at her stomach, and the febrile symptoms immediately disappeared. The matter discharged on the three or four subsequent days contained a large proportion of pus; after which for several days it was perfect lymph.

After about a fortnight the discharge entirely ceased, the tumour disappeared, and the poultice was exchanged for a bandage and compress, and the enfeebled vessels strengthened by astringent lotions and gentle friction, by which means a complete cure has been effected.

The second case occurred in a person of a more robust and healthy constitution, aged twenty-eight, supervening on natural and easy labour. On the second day after parturition she experienced great rigidity of the abdominal muscles and integuments, which gradually became more tense and painful. The surface of the swelling, as in the other case, was unequal, having the appearance of bunches and ridges; the symptomatic fever was considerably violent, which was evinced by a frequent pulse, flushed countenance, and great thirst. These symptoms continued to increase until the end of the fifth week, when suppuration (preceded by strong rigors) commenced from a small opening a little below the navel.

The discharge was very copious, and evidently a mixture of pus and lymph. Ulceration in two or three other parts of the abdomen successively took place. The secretion of milk was almost entirely suppressed, and the child taken from the breast. Suppuration continued about six weeks from its commencement, when the tumefaction had completely subsided;

sided; but the patient remained in a very debilitated state for nearly six months.

The disease was in this instance considered by the physician a *consumption*, and from the treatment pursued, it is evident nature had her full operation.

"Mr. White attributes the proximate cause of the disease in question, to an obstruction, detention and accumulation of lymph in consequence of some accident happening during labour, or the continued pressure of the lymphatic vessels by the head of the fœtus."

"Mr. Trye thinks it may be occasioned by pressure, or by the absorption of some acrimonious matter."

Dr. Ferriar thinks it may be produced by some violence during labour, but says "The balance of the circulating fluids is suddenly and violently changed; there are new determinations, new sympathies produced in a state of debility, agitation and anxiety. It cannot therefore surprise us, that, under circumstances so peculiar, a set of vessels commonly exempted from inflammatory affections, should take on an unusual disposition."

Dr. Hull offers the following explanation of its causes. "1st. The increased irritability and disposition to inflammation which prevail during pregnancy, and in a still higher degree for some time after parturition. 2dly. The over distended or relaxed state of the blood-vessels of the inferior part of the trunk, and of the lower extremities. 3dly. Contusions or violent exertions of the muscles about the pelvis and thighs. 4thly. Plethora, occasioned by a suppression or diminution of the lochia, or of the secretion of milk. 5thly. Food taken too freely. And 6thly. Standing or walking too much or too early."

In refutation of Mr. White's opinion, I will state, that in no instance that has come to my knowledge, has the disease preceded parturition.

Mr. Trye's theory is mere supposition. In reply to Dr. Ferriar I will adduce the fact, that phlegmasia dolens as frequently follows natural and easy labour, as difficult and laborious.

Without entering more particularly into an examination of these theories, I think them inadequate to a full and rational explanation of the causes.

After an attentive observation of cases, and a careful examination of the subject, I will humbly offer the following explanation, as the most satisfactory to me.

During gestation the abdominal muscles, their vessels and integuments, are in a state of great preternatural distention; immediately after parturition, when the distending cause is removed,

removed, these parts powerfully contract in order to regain their natural dimensions. If this effort be unequally exerted, if it be suddenly excited by the application of cold, if the lymphatic vessels be over distended at the time of plethora, or great debility subsists in the vessels themselves, an interruption and accumulation of the fluid ensues; the great and long-continued accumulation of which, acting as an extraneous and offending cause, will occasion inflammation. In persons of a plethoric and irritable habit, inflammation may quickly supervene; while on the other hand, in a person of a contrary description it may be more tardy in its progress.

This opinion is rendered still farther probable from the consideration of the fact, that inflammation of the mammæ usually occurs during the early stage of lactation. At this period the vessels are incapable of immediately adapting themselves to the sudden accumulation of the fluids, and from their winding direction do not dilate uniformly throughout their whole course, in consequence of which congestion readily occurs. From their unusual and over distended state, inflammation easily takes place on the sudden application of cold.

In those cases which have come to my knowledge, a swelling and enlargement of the parts has uniformly appeared first in the lower part of the abdomen and inguinal glands. That a swelling of the inferior extremities should so frequently succeed to an obstruction of the vessels where they enter the abdomen, will be evident to every one who is acquainted with their course.

In reply to the question, why does not this congestion take place in the sanguineous vessels? it may be answered, that the blood circulates more rapidly, is impelled with greater force, and the vessels do not pass through a congeries of glands.

In the ordinary mode of treatment, much time is lost in the inefficacious use of diuretics; and much mischief and pain produced by the application of blisters and other stimulating remedies. From the low state of sensibility in the lymphatic vessels, inflammation proceeds slowly, and the delay occasioned by the neglect of proper means, or by the use of improper remedies, adhesive inflammation takes place, which often aggravates the disease and renders the cure very tedious and difficult.

From the view here taken of the subject, I am fully disposed to regard it as a local disease, and decidedly recommend the early application of a large emollient poultice, which, by its relaxing and resolving power, will, in a great majority of cases, prevent the formation of a distressing and tedious disease; and, where it does not produce this most desirable effect, I should recommend its continuance with an intention

intention of producing early suppuration, which I think, next to resolution, the most speedy and safe termination of the disease.

NOTE. The distinguished physician and philanthropist, Dr. Lettsom, of London, makes some remarks on this disease, in a late letter to one of the editors, which it seems proper to introduce in this place. "The disease, called, by the French writers, 'dépot de lait,' has been elaborately written on by Drs. White, Ferriar, and Hull, of Manchester. The first severe case of it came under my care about thirty-five years ago; but I have since frequently seen it. It is painful and alarming in some instances, though it soon yields to medical treatment. If the pain be considerable it may be allayed by fomentation of poppies; but usually, an embrocation of spiritus mindereri, or weak solution of acetate of lead, with the aid of gentle pressure by a flannel or calico bandage, soon dissipates the swelling; and with the internal use of tonics, such as infusum rosæ, or cinchonæ, the strength and general health are soon restored." *New-Eng. Jour.*

For the Medical and Physical Journal.

On the occasional bad Effects of Ergot, administered to promote Parturition.

HAVING observed by some publications, that suspicions and doubts have arisen as to the occasional bad effects of Ergot on the infant during parturition, I beg leave to state the following case.

Some time since, I was requested to attend a patient, then in labour for the third time. Her two former labours had been perfectly natural; the second especially was attended with very few pains. When I visited her, the pains were rather strong, and the os uteri so well dilated, that a very speedy termination of the labour seemed probable. Soon after, the os uteri became fully dilated; but in a short time I observed that the head advanced more slowly than one might expect under such circumstances. The pains, however, continued as long as two hours more, then gradually subsided, and at last wholly ceased. Various attempts were made to re-excite the pains by stimulating the os uteri with moderate pressure, by causing the patient to rise and walk about, yet all without effect. Conceiving that further delay might be attended with some ill consequence, I resolved to employ the lever, having a confidence in that instrument, and a facility in the use of it. In a short time the head was moved from the spot where it seemed to be bedded, and the operation of the instrument being aided by slight pains, in the space of twenty-five minutes a healthy child was delivered.

On drawing down the umbilical cord, with the intention of extracting the placenta, more than common resistance was felt, which induced me to place a hand on the abdomen, by which it appeared there was another child to be delivered. This circumstance was not mentioned to the mother, as it was thought likely to discourage her, after the suffering and apprehension she had already experienced; but she was told that it would be necessary to wait an hour for the extraction of the placenta. The hour passed away therefore with great patience on the part of the mother, but not so much on mine; for there was not the slightest appearance of pains during that time. At this moment I was called on by another practitioner, to whom I thought proper to mention the case, when he suggested the use of Ergot. Having myself sometimes used that substance, I was surprised that it had not occurred to me in this instance, and immediately resolved to employ it. Fifteen grains of the powder were at once given in a little water. In fifteen or twenty minutes the pains came on, and continued without remission till the child was born, which was in about twenty minutes from the time the pains commenced, the head being born first, as in natural labours. The child made no efforts to cry, which induced me to dash water and spirit upon it, then to rub it with the latter about the head and breast, and to clear its mouth of mucus; these things failing, I attempted to inflate the lungs, but some time being consumed in obtaining the necessary articles, the child was lost. It was in every respect as fine a child as the first, perfectly fresh and firm; and the umbilical cord pulsated when it was first born.

Every one who is acquainted with the facility with which, in a case of twins, the second child makes its way into the world, will consider the death of the child, in this instance, as an unusual occurrence. For my part, I confess I was at first wholly at a loss to explain it; but on mentioning it to two or three medical friends, one gentleman remarked that his observations had led him to believe that *Ergot* sometimes proved fatal to the child; and another, a physician of great experience, said, without any intimation of the kind from me, "Ergot kills the children." On what observations the opinions of these gentlemen were founded I know not; but, since I have reflected on the matter, have no hesitation in declaring my opinion, that in the case related above, the unremitting contraction of the uterus, produced by the administration of this substance, forced down the child so steadily and strongly, as by a long-continued and violent pressure on the brain to destroy the life of the child.

A YOUNG PRACTITIONER.

(New-Engl. Journal.)

For the Medical and Physical Journal.

A History of a Rupture of the Uterus during Labour; by JOHN RAMSBOTHAM, M.D.

MRS. D. æt. 43, fell into labour of her sixth child early on the morning of Sunday the 10th of July. Her preceding labours had been natural but lingering, and her children had been born alive, except the first: in that instance the labour was of longer continuance, and she suffered more from its effects than afterwards; yet it was at length completed by the natural powers. Her general health, naturally somewhat delicate, had been as good as usual during her pregnancy; and, upon the whole, she had passed through that state with as little general inconvenience as on former occasions. Previous to her falling into actual labour, however, she had several times been attacked with slight recurrent pains in the night, which had induced her to apprise her professional attendant of her situation; and partly from this circumstance, to which in her former pregnancies she had been unaccustomed, and partly from the suspicion that she might have twins, she became low-spirited, and had got her mind impressed with the idea that she should not do well.

About seven o'clock on the morning above-mentioned, the immediate attendance of her accoucheur was requested. On his arrival, he was informed that the labour-pains had commenced a few hours before, and had been gradually increasing in strength, so that they appeared to be regularly established; on an examination, the membranes were found considerably protruded through the os uteri, but the head of the child was above the brim of the pelvis, and could scarcely be felt. After a little time the membranes gave way, the waters were suddenly discharged in considerable quantity, and the head was observed to be descending, yet still remaining high; it was however presently found to advance by the assistance of the pains, and, under the present circumstances, the patient was promised as favourable a delivery as in her preceding labours. For some hours the labour appeared to go on in a regular natural course, the head of the child advanced in the pelvis, yet slowly, and the patient kept up her spirits: but in the early part of the afternoon, she complained of an unusual sort of pain, shooting from the stomach to the back (as she expressed herself) which she described as a sort of *stitch*, very different from any pain she had experienced in her former labours; this new pain was accompanied with some difficulty of breathing, occasional hiccough, slight vomitings of a glary mucous fluid,

and repeated eructations, which were extremely troublesome to her, and she complained much afterward of the inconvenience produced by them. The regular labour-pains continued to be sufficiently strong, and of the expulsive kind, and did not appear, *at present*, to be at all affected by the accidental occurrence of these new and unusual symptoms; they were therefore attributed to the effects of the process of labour upon a delicate frame and to wind; but though the pains did continue strong and expulsive, they did not produce much advance of the head, which seemed wedged in the pelvis. Besides, this general state of the patient occasioned the less uneasiness, as her former labours had uniformly been tedious, and had called forth great exertions before they were completed. Towards evening, still complaining of being much inconvenienced by this unusual pain or stitch, six or eight ounces of blood were taken from the arm; during this operation, the patient was set upright in an easy chair, and remained in that posture for some time. Hitherto the labour-pains had been strong and frequent, yet had of late produced little effect upon the head in its advance through the pelvis; but some time hence, they were observed to diminish in strength, and to have longer intervals, still, however, retaining the characters of expulsive pains; the patient had also occasionally mentioned a sense of faintness, which was supposed to arise from the loss of blood from the arm, for as yet there had been only a trifling-coloured discharge from the vagina. The extremities were cold, and the pulse had become languid. The accoucheur had occasionally applied his hand upon the abdomen, and had noticed an uncommon irregularity of the abdominal tumour, which assumed a character very different from what he had ever observed in natural labours: the patient herself was also satisfied there was something peculiar in her situation, and had repeatedly enquired whether such peculiar sensations might not be occasioned by twins. She still suffered considerably from frequent eructations, and continued to ascribe a great part of her sufferings to wind, with which she had hitherto been much troubled.

As the labour seemed to have made no progress towards a conclusion for some hours past, and as the patient was considered, from the general symptoms, to be in a state of danger, a consultation was requested, and, between nine and ten in the evening, the husband of the lady waited on me, and urgently desired my immediate attendance. On my arrival at the bed-side of my patient, I found her under a state of considerable exhaustion, evidently unconnected with hæmorrhage or other external symptom, and apparently

not produced by the common effects and course of a lingering protracted labour; her countenance was very much dejected; her spirits depressed; her breathing frequent and laboured; her pulse small and rapid; and her hands cold and clammy. She had occasional slight labour-pains, but they were not at this time of the expulsive kind, and complained much of a sense of *sinking*, which is very inadequately expressed by the term faintness; upon the whole, the quantity of coloured discharge from the vagina had been, as yet, inconsiderable. On examining the abdomen, its general enlargement appeared as great as under the common circumstances of labour, but I could detect no uniform uterine tumour; and, on pressure with the hand, various inequalities in its general extension were distinctly observable. The head of the child was low down in the pelvis, but it had not effected its turn, so as to place the occiput under the pubis.

Under such unfavourable appearances, I recommended immediate delivery; and by the assistance of the vectis, the head was extracted within a very moderate space of time; some expulsive efforts soon followed, which essentially forwarded the delivery of the shoulders, body, and feet, of a still-born infant. Immediately after the birth of the child, a considerable discharge of fluid blood took place, which, if continued, under the exhausted state of the patient, seemed quite inconsistent with any chance of recovery. This occurrence induced me to attempt, without loss of time, the removal of the placenta. On examining the vagina, all the parts felt particularly flaccid, and on carrying my hand upward, guided by the funis, I was soon satisfied that it was not within the uterus, but must have passed into the general cavity of the abdomen. On bringing the funis gently to its bearing, I observed the placenta to descend gradually; and, receiving it in my hand, I readily withdrew it. During this part of the operation, I could perceive the contracted uterus before my hand on the fore and lower part of the abdomen. I afterwards with my hand examined the external surface of the abdomen, and found the uterus as well contracted as under the common circumstances of labour, and in its usual situation just above the pubis. After delivery, the patient remained in a languid exhausted state for some time, but after the exhibition of some cordials and an opiate occasionally, she considerably revived, spoke with cheerfulness, and expressed herself to be quite relieved; warmth also returned into her extremities. During the remainder of the night she was free from pain, and towards morning got a little unrefreshing sleep. On visiting her the next morning,

I found

I found her cheerful, and free from pain, except on pressing the belly; the countenance had resumed its natural appearance; she had passed her urine without any difficulty; but her pulse was small and quick. An opening mixture was directed in divided doses to relieve the bowels. At nine in the evening, she continued very much in the same state; but the pulse was observed to be increasing in velocity, and the belly to have become more tense and tender. The bowels had not as yet been relieved; clysters were therefore desired to be occasionally injected. After the middle of the night, she changed for the worse; the stomach began to reject whatever was taken into it; the restlessness and anxiety increased; the belly became more tense and tender; towards morning the powers of life were observed gradually to decline, and she died about eleven on the Tuesday forenoon.

Leave was obtained to inspect the body the day following. On dividing the abdominal parietes, the uterus was observed to be well contracted, and of its usual shape; appearances of inflammatory affection shewed themselves on the peritoneal coat of the intestinal canal, and within its folds were small coagula of blood; on raising the uterus forward, a fissure or rent was found on its back part near the cervix, sufficiently large to admit the hand, running nearly from side to side, but which had not implicated the os uteri, vagina, or rectum, in the ravages it had made. The projection of the sacrum was also greater than in a well-formed pelvis.

Through this rent in the back part of the cervix uteri, the contractions of its fundus and body had propelled all the child with the placenta into the cavity of the abdomen except its head, which was fast jammed in the pelvis and could not retreat. The rupture most probably took place in the early part of the afternoon of Sunday; when the patient complained of that peculiar pain or stitch, followed by a sense of sinking, and other unpleasant symptoms; and the expulsive pains which continued after this event, without making any impression on the head in its advance through the pelvis, were those uterine contractions by which the child was expelled its cavity, and escaped through the rent into the belly. The irregularities before noticed in the abdominal extension, were the limbs of the child felt through the abdominal muscles. By referring to the pages of your valuable Journal for October 1813, your readers will find another account of a ruptured uterus, with some remarks; forming, with the present case, a tolerable history of this unfortunate occurrence.

JOHN RAMSBOTHAM.

For

For the Medical and Physical Journal.

On Mr. Want's Discovery of the Mode of preparing the Eau Medicinale; by Dr. SUTTON.

I OBSERVE, in your last Number (for July), a paper written by Mr. Want on the cure of the Gout, by a medicine which he conceives to be the true eau medicinale. It certainly is a creditable effort in any gentleman to endeavour to discover of what a secret medicine, of acknowledged usefulness and powers, consists; as the public ought to have more real confidence in a medicine whose properties are known, and which the regular faculty can recommend, than in one which has not acquired such a sanction. But if it should happen that this secret medicine, whatever it may be, should be proved to possess no greater efficacy than many known remedies, then the real value of the discovery is much diminished, and it becomes a mere matter of curiosity. I consider the discovery of the composition of the French nostrum, at the present time, exactly in this point of view, because I am confident that we possess a numerous class of medicines which are as equally capable of subduing a paroxysm of gout as the eau medicinale. I much doubt, however, whether Mr. Want has arrived at the discovery of this last medicine, though I am far from concluding that his paper is devoid of interest on that account; for I am fully convinced that he has announced a medicine which is capable of effecting all he has stated. The value of Mr. Want's communication, I judge, consists in announcing the cure of forty patients in the gout by a known medicine, and by exciting an action* which has been before stated to be capable of subduing the paroxysms of this disorder. It also announces the use of a drug which has not been of late employed for the purpose, if it ever was at any time; but the latter, in my opinion, is by no means so important to establish as the result of the prac-

* This case shews decidedly that a regular fit of the gout may be rapidly cured by exciting the intestines to powerful action, and that this desirable object may be accomplished by the aid of known remedies. *Vide* Tracts on Delirium Tremens, Gout, &c. by Thomas Sutton, M.D. page 206, bottom of the page.

To subdue a paroxysm of the gout, it must be observed that the operation (of cathartics) should be powerful; and, although we may not be able to show the exact reason of this, it must be kept in mind that attention to this point is the material circumstance to be relied upon for complete success in subduing the paroxysms of gout. *Idem*, p. 208, bottom of the page.

tice,

tice. This remedy is announced by Mr. Want with a great degree of candour; and, though it may be as eligible as the eau medicinale, I judge it not to be one so generally applicable as might be wished. It may be that the drug called hermodactyl by Trallian may happen to be a very different one to that which we have used under that name;* and, as he appears to ascribe to it a more powerful cathartic operation than we find in the modern hermodactyl, Mr. Want's medicine may therefore come nearer in effect to the drug used by Trallian. But this neither proves that the colchicum autumnale is the hermodactylus of Trallian, nor that the eau medicinale is prepared from this drug. We indeed find, that he recommends scammony to be occasionally added to his medicine, in order to obtain a complete evacuation of the bowels, as may be seen by Mr. Want's quotation, which one might presume it would not need if the hermodactyl of Trallian was the real colchicum autumnale.

Several years ago I recommended a preparation of elatorium and opium to imitate the operation of the eau medicinale, and it was not only found to be equally effectual, but to operate in the same precise manner. A gentleman to whom I prescribed this medicine, in the dose of two grains to sixty drops of laudanum, and who had frequently taken the eau medicinale, told me that the sensations excited in him were precisely the same as those occasioned by the French nostrum. But the object that always seemed of the most importance to me on this subject, was not what the French medicine consisted of, so much as by what operations it produced its salutary effects. These appeared to me to be effected, in the most material and most permanent degree, by a powerful action on the bowels, although it certainly more immediately allays the violence of pain by its anodyne quality. Having come to this conclusion, if accurate, we have laid open to us a numerous class of medicines, which

* Alston considers this to be the case. (*Vide* Alston's Materia Medica, article Hermodactylus.) But as it is very evident that the colchicum autumnale could not be the hermodactyl of Turner, as his prescription directs fifteen grains at a dose, with equal parts of other purgatives, (*vide* Allen's Synopsis Medicinæ, art. Gout;) and Stœrck, who paid much attention to the operation of colchicum autumnale, states, that a quantity of less than a grain, wrapped up in crumbs of bread, and taken internally, produced alarming symptoms. A strong infusion of the linum catharticum, or purging flax, has been used by several persons in this neighbourhood, in gout, with success. This medicine produces very copious actions on the bowels.

may effect equally beneficial purposes. This I have stated in my Tract on Gout; and I never, in curing an ordinary paroxysm of this disease in a healthy subject, think so much of the sort of purgative it is necessary to give, as of the doses which will induce the quantum of operation I wish to arrive at.

By keeping this in view, Epsom salts, aloëtic purgatives, calomel joined with other purgatives, jalap, gamboge, and other cathartics, given in such doses as to produce a powerful action on the intestines, may each accomplish all that is necessary, which, when this has been effected, may be followed by an anodyne at night; and these proceedings have caused as much benefit as I have ever heard the eau medicinale was capable of doing. The inquiry, therefore, having assumed this form, we are able to select from a large class of purgative medicines what may appear to be the most eligible for the various conditions of the disease and of constitution, and be able to attend to those idiosyncrasies that we occasionally meet with in persons under this disorder.

Thus far I can aver in the cure of gout, or an attempt to ameliorate the symptoms, that there is no state, short of that in which death appears to be quickly approaching, in which something may not be beneficially done by a prudent use of purgatives, and by having the whole class of them thrown open for selection. But if, on the contrary, the proper virtues of purgatives for the cure of gout can only be supposed to reside in such as the French medicine, or in such drugs as the colchicum autumnale, or as the elaterium, or as hellebore, then we should find numerous instances in which we would rather allow nature to take her course, than endeavour to controul the gout by medicines which might promote a very powerful effect on feeble constitutions, on irritable stomachs, and on other conditions in respect to age, disease, habit, &c.

By the proper use of purgative medicines in numerous instances of gout, I have seen the paroxysms of this disease overcome in the short space of a few hours, and the entire restoration of the limb affected to follow in a few days: in others, where all this benefit could not be expected to ensue, I have observed the pain to be quickly subdued, and the patient to return to a better state of limbs than before the attack of the disease. In only one instance have I found the powers of purgatives to subdue a paroxysm of gout, and a perfect restoration not to follow, where it might have been expected. This case was also as little benefitted by the eau medicinale. The patient had, however, the satisfaction to find an increase of healthful feelings, by pursuing the plan laid down in my Tract on Gout, though the paroxysms, although

though ameliorated, continued to return. It is too early yet to judge how far the plan laid down for this patient may be wanting in ultimate success. We ought not, however, to be discouraged by a few cases not suffering all the controul that appears to be capable of being effected in a great majority; nor ought those to detract much from the important views in which the cure of gout has of late years been placed; nor should the benefit capable of being attained by many be disregarded, because it cannot be extended to all. In the case alluded to, there are circumstances which evidently separate it from the ordinary and concurring symptoms of the gout, though, on a superficial view of the disease, it would be difficult to consider it to belong to any other species of disorder.

Croom's Hill, Greenwich, THOMAS SUTTON, M.D.
July 4, 1814.

Mr. WANT *in answer to* Dr. SUTTON.

THE preceding observations are made with a view to depreciate my discovery of the mode of preparing the Eau Medicinale, because, as Dr. Sutton says, he is confident we possess a numerous class of remedies which are as capable of subduing a paroxysm of gout as the eau medicinale. Were this assertion supported by the experience of the profession, my discovery would, I admit, be of no value. If salts, magnesia, and rhubarb, will cure gout, as Dr. S. would have us believe, there can be no necessity for having recourse to a potent and deleterious drug, as mine is. But I can affirm, from repeated experiment, that no one of this numerous class of remedies deserves the character bestowed upon them. The doctor may be very correct when he says that Epsom salts and aloes have done every thing *he has heard* the eau medicinale is capable of doing; for, to adopt his own language, if it should *happen to be* that he is proved to be totally unacquainted with the curative properties, or the sensible effects of that remedy, the efficacy of these medicines may not be much overrated.

The infallibility of this class of medicines is maintained throughout the whole paper, but the sentiment is so diffused that it is difficult to fix upon a sentence sufficiently decisive to afford matter fit for quotation. The author, indeed, in one place distinctly asserts that there is no state short of that in which death is actually approaching, in which something may not beneficially be done by the prudent use of purgatives; and such has been the success of his practice, that in only one instance has he found the powers of purging to subdue a paroxysm of gout without a perfect restoration following; and he never thinks so much of the *kind* of purgative, as of the *quantity* of operation necessary to be induced. After having established that *all purgatives* will cure gout, the doctor proceeds to show that my medicine operates by exciting an action (on the bowels) which had

before been stated to be capable of curing the disease. Now, the legitimate inference from these premises would be, that, although I did not deserve to be immortalized for the discovery, yet my medicine, being a purgative, was at least capable of curing the gout. But Dr. S. draws a very different conclusion, for although, he observes, the medicine may be equally eligible with the eau medicinale, yet he judges it not to be so extensively applicable as might be wished. Let it, however, be understood, that I quarrel with this conclusion only, as being inconsistent with what the author had previously maintained as indisputable facts, for it requires no peculiar sagacity to discover that this or any other known remedy is not so universally applicable as might be wished. I have made no promises of infallibility; I simply state that this medicine does that which the eau medicinale is capable of performing; and I recommend it to those only who have experienced the good effects of that remedy.

That it is not so extensively applicable as could be wished, may be collected from my own paper, wherein I have expressly adverted to its bad properties. I have there stated, that in some instances its employment may be attended with consequences fatal to the patient, particularly when administered without regard to the peculiar circumstances of the case. That this expression implies the existence of a case in which it is inapplicable, is a proposition that surely cannot be denied.

The assertion that all purgatives will cure gout, is so obviously unsupported by common experience, that our readers will scarcely require its refutation; and it only remains for me to show, that the curative powers of the colchicum autumnale are quite unconnected with its purgative operation. Upon this I may observe, that in many cases it removes the paroxysm of gout without *any sensible operation of any kind*. This fact is *very notorious*. If Dr. S. requires the proof of it, I may instance (among many others) the case of the illustrious President of the Royal Society, long known to have been a martyr to the disease. Sir Joseph Banks assures me, that in him the eau medicinale never produces any action on the bowels, while it never fails to relieve him; and he farther states, that the accidental occurrence of purging will generally bring on a fit of the gout, and, if present, materially aggravate the complaint. But this seems to arise from a peculiarity of constitution not constantly met with; though we are not without other examples of the same kind. It was probably the same idiosyncracy which induced Sydenham so strongly to deprecate the employment of purgatives under any circumstances in gout. Lucian, in his poetical and very accurate account of this disease, intimates the tendency of purging to produce or aggravate the fit, when he makes the goddess Podagra say, she would fall with greater fury upon those who purged themselves with the hiera picra. These instances, however, have not made me insensible to the value of that class of remedies, for, in the month of August 1811, I wrote an essay for the Med. and Phys. Journal expressly for the purpose of recommending them, *not as infallible*, but as being most extensively useful. The elaterium, which Dr. S. takes to himself the credit

credit of introducing into practice, though his Tract did not appear till the year 1813, was first recommended by *me* in 1811, accompanied with cases of success from its employment, and it may be remarked that one case is there related where it failed,* as purgatives frequently do; and the patient has since my discovery been invariably relieved, and the paroxysm removed, by the colchicum.

It cannot be denied, as ***I have shewn in my former essay***, that the drastic purgatives, (the foremost among which is elaterium,) are, if properly administered, very useful in the treatment of this complaint; but they have failed, and will fail in a multitude of cases, perfectly within the influence of the meadow saffron.

Dr. Sutton says, the hermodactyl described by Trallian *may happen to be* a very different medicine from that which we use under that name. If it *only may happen to be*, it *may not be*, different. If the doctor had any doubts respecting it, it was incumbent upon him to state the reasons which induced him to differ. He assumes indeed that Alexander ascribed to the hermodactyl a more powerfully purgative operation than we find in the modern hermodactyl. I am at a loss to conceive what foundation there can be for this opinion, when we are expressly told by this author, as Dr. S. unaccountably admits, that even in cases where a large dose of his medicine seems to have been prescribed, if a fuller evacuation from the bowels was desirable, scammony was to be added.

Ει δε θελεις επι πλειον υπαγειν την γαστερα προσμιγνυε σκαμμωνιας κ.τ.λ. και αλυπως καθαιρει και ανωδυνες ποιει τας πασχοντας.
Alex Trallian, cap. xi.—περι ανωδυνων αφιδδιων και φαρμακων καθαρτικων.

Here appears no evidence of extraordinary purgative powers possessed by the hermodactyl, and, admitting that it sometimes occasioned the watery evacuation from the bowels described in my last, yet we are led to conclude there were cases where it failed to produce this effect, and where the addition of stronger purgatives was rendered necessary. It cannot escape notice that from a part of this quotation (καθαιρει αλυπως) it appears that even the addition of so much scammony (16 grains) was supposed to render it but a ***mild purge***. In my experiments with the eau medicinale, colchicum, and the modern imported hermodactyl, I find they are also severally very variable, and equally uncertain in their operation, which seems to be governed by constitutional peculiarity, so much so that in scarcely two persons have they precisely the same effect. This fact has been universally remarked with respect to the Eau Medicinale; and it is so striking in the other two as to add, in my opinion, very considerably to the evidence of their identity. In the case of Mr. Wallis, of Judd-street, now under my care, a full dose of the Tincture of Colchicum produced a sickness with vomiting, which continued to harass him for twenty-four hours, and yet this extreme dose produced no purgative operation whatever. I have witnessed the same effect so frequently, that I have no hesitation in maintain-

* Of John Tomkin Great St. Andrew-street, Seven Dials.

ing, that in a multitude of cases, if given in a dose just sufficient to cure the patient, and no more, it will be found to exert no purgative quality whatever, and very little sensible operation of any kind. This has probably been observed by those writers on the materia medica who affirm that the modern hermodactyl has scarcely any purgative power, and who, from an erroneous idea of the stronger purgative qualities of the ancient medicine, are from this circumstance induced to believe them essentially different. But, if we extend our researches, even among the ancients we shall find the same virtue and the same power ascribed to their hermodactyl. In the compositions of the Arabian writer, Mesue,* it is generally, if not invariably, mixed up with drastic purgatives, which generally constitute the greater bulk of the compound. Dr. S. refers to Alston, in support of his opinion; but this writer has furnished us with a striking quotation from Mesue, which refutes himself. The Arabian physician tells us, in the most unequivocal terms, that the hermodactyl, (the ancient,) *if unmixed with other medicines, is scarcely a purgative*:— "per se enim tarde et imbecille vacuat." Paulus Ægineta, who is said to have practised about fifty years after Trallian, tells us the hermodactyl moves the bowels, but does not lead us to expect strong purgative effects from it.†

Thus we find the same degree of power ascribed to both the modern and ancient drug by the writers of their respective times; and, if we attentively investigate the subject, we shall discover also the same contradictions and the same implications of the uncertainty of their operation, which I have discovered to be equally characteristic of the meadow saffron and the eau medicinale. There seems then no reason to believe them to be different medicines, from the supposed discrepancy between the modern and ancient writers.

Impressed with the belief, that the modern hermodactyl possesses less purgative powers than that described by the ancients, Dr. S. conjectures that the colchicum autumnale, on account of its stronger operation, may more nearly resemble the drug prescribed by Trallian. That it does not only resemble Trallian's drug, but is the same medicine, is a fact of which I do not entertain the smallest doubt; but I do not discover this resemblance in the stronger purgative operation it is supposed to be endued with. I have before denied that there is any foundation for believing this strong purgative power to be an *invariable* property of the ancient hermodactyl, from which, if correct, it will follow that this supposition of our author is entirely gratuitous. In the case of Mr. Wallis, before adverted to, it had no such operation, though given in an *extreme dose*. Upon what authority, I would ask, does the doctor suppose this plant to be possessed of that quality? Certainly not from his own personal observation, or we should never have had the account of Storck's expe-

* *De Medicamentis simplicibus et compostis.*

† Hermodactyli radix et per se & ipsius decoctum habet vim purgandi: privatim arthriticis tunc, cum humores defluunt exhibetur, verum stomacho nimis quam adversatur.

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riment upon himself,* brought as an evidence on the occasion, a story more ridiculous and monstrous than any to be found in Baron Munchausen, and which can only be equalled by the countless falsehoods contained in his several publications.

The writers on the materia medica are generally silent as to this purgative effect of colchicum.† The English dispensatories who quote from Storck never hint at it. I have not time at present to peruse Storck's book, (which I have never yet thought of sufficient importance to procure, on account of his notorious inaccuracies;) but it is reasonable to suppose, that if he had seen it exert a purgative operation, he would have named it, and they would have copied him. I am not acquainted with any writer who has himself seen this effect; but the little time allowed to an answer of this kind in a public Journal, will not permit me to enquire very minutely into the circumstance. Dioscorides, as well as some modern authors, are of one accord as to its poisonous qualities. The former of these says, the colchicum, if *eaten*, like the fungi, kills by strangulation, but never mentions purging:

Βρωθεισα δε κλινει καλα ωνιγμον ομοιως μυκησιν.

Geoffry, who seems to be unacquainted with the properties of the plant from personal observation, says, "it is related that those who *eat it* experience itchings throughout the whole body, tearing pains in the bowels, with heat and weight in the stomach. As the symptoms increase, blood is voided by stool, and the colchicum comes away in pieces."‡ I have seen cases in which it produced a most alarming

* Storck was a German physician of extensive reputation, the disciple and contemporay of the great De Haen.—De Haen, in his hospital, before a numerous body of students and practitioners, tried in vain to produce the same curative results from cicuta, one of Storck's panaceas, which Storck professed to have witnessed, and challenged him publicly to demonstrate to the medical students of the university the truth of his allegations respecting it—*it was never done*. De Haen investigated the fact alleged by his former pupil respecting the cure of thirty-six cases of cancer, and found thirty of them had died the victims of the disease, and six remained uncured. See his Epistola de Cicuta.

In a cotemporary publication, written by Storck or his friends, entitled "Alethophilorum quorundam Viennensium—Elucidatio necessaria Epistolæ de Cicuta," De Haen's conduct was ascribed to envy; but whatever be the motive, the fact is undoubted: for the falsity of all Storck's publications on materia medica is quite proverbial.

† I am indebted to Sir Joseph Banks for a neat epigram on the colchicum, the two last lines of which are appropriate to our subject:

Illinor arthesi utiliter—solorque podagram
At ne me *mandas* ni cupis mori.

The last idea is literally transcribed from Dioscorides.

‡ I find this is copied from Dioscorides under the article Ephemerum, which he calls Colchicum. The term has probably been given to it from the supposition of its producing death *in one day*.

sense of suffocation, from the globulus hystericus and flatulent distension of the abdomen, without purging. Though more commonly, in a full dose, it has this effect; which if it does take place, immediately removes the sense of suffocation. This is one of the circumstances in which I have observed, as referred to in my last, such coincidence in effect between the hellebore (which rarely purges) and this medicine.

One author only, Ludovicus, relates, that a single root of colchicum almost killed a patient *by purging*. Garidel, in his Histoire des Plantes des environs d'Aix, records, that a servant whom he attended was killed by taking the flowers for an intermitting fever, in which it is said to be useful. The symptoms were probably those mentioned above, which he terms "anxietés et des tranchés pendant trois jours;" no purging is mentioned. The Turks are said to intoxicate themselves with the flowers macerated in wine.*

Prosper Alpinus says the colchicum is perfectly inert, and that the Ægytian women fatten themselves with the *roasted* roots, often eating twenty in the course of the day, without any evacuation from the stomach or bowels.† But let it be observed, these roots were *roasted*, the process of which may materially alter their properties. Thus the onion, an acrid, stimulating, pungent root, when roasted loses all these qualities, and the same is true of many other plants that could be named.

Cartheuser, misled by this quotation, says, that the plant growing near him *also* has neither diuretic or cathartic power, nor does it possess any noxious property.—"*Id compertum habeo* nostri pa-

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* *Geoffry, Materia Medica*, vol. vi.

† "Mulieres Ægyptiæ, *scribit*, multa factitant in balneis, ut pingues evadant.—Comedunt etiam adhuc multa, gallinas quippe arte pingues factas, nucemque Indicam in jure dissolutam, ac in massam redactam. Sed ex omnibus pro secreto habent singulo die, dum eunt dormitum, ad decem vulgares bulbos, pro hermodactylis a nostris Pharmacopœis receptos, quos aliqui potius Colchicum esse autumant, contostos mandere, eosque pluribus diebus, quindecim scilicet & viginti ad usque frequentant. Ex quorum usu, quod nostris mirum videbitur, nihil vel per alvum, vel vomitum, evacuant, minusque aliâ molestiâ mulieres vexantur, &c."—*De Medicinâ Ægyptiorum, Lib. III. Cap. XVI. pag.* 109.

Again:—"Mulieres pauperculæ, sumptum pro aliis ferre nequeuntes, vulgares hermodactylos, quibus communiter nostri pharmacopœi utuntur, modicè contostos, æque atque nos castaneas edimus multos unicâ vice, ad impinguescendum, devorant, ex quibus neque alvus aliquo pacto turbatur, neque aliud quippiam mali accedit. Hinc nostri pharmacopolæ scire possunt, quantum, illis pro vero hermodactylo utentes, hactenus erraverint. Egoque hos non parum admiratus sum, quando Ægyptiæ mulieres earum radicum (quas sine dubio si modo Dioscoridi credendum sit, Colchici esse quisque herbarum materiæ peritus fatebitur) per multos dies, ad decem & plures etiam, euntes dormitum sumpsisse, instarque castanearum comedisse, sine ullâ noxâ, ibi sæpius compererim, &c."—*Lib. IV. Cap. I. pag.* 118.

riter colchici communis, in Marchia et Silesia superiori crescentes radices nec *catharsin nec largiorem diuresin* concitari nec hominibus etiam lethiferas et saltem noxias existere."*

A difference of soil and climate *might* produce a variation in the strength of this drug, but it will be easy to account for the contradictory statements of authors respecting it by the singular diversity of its operation in different constitutions. The opinions of Alpinus may be clearly traced to the fact of his colchicum having been roasted, and others *(cæci cæcos sequentes)* have copied him without taking the pains to inquire whether he was right or wrong. Its history is one of the most striking instances of the careless manner in which medical investigations are for the most part carried on. Here is a plant possessing peculiar powers, and is described as far back as the time of Dioscorides, and by most, if not all, succeeding writers on materia medica; and yet these properties have invariably escaped observation by those whose business, as authors, it ought to have been to have ascertained its effects.

The identity of the tincture of colchicum and eau medicinale, is a question which can only be determined by attentive examination, and comparison of their respective operations on the human body. I will pledge my professional reputation for the truth of what I have alledged on this subject. My practice in gout has been very great, and, where these remedies appeared likely to be useful, I have administered them with the most careful observation of their effect, and have never once entertained a doubt of their being the same medicines. I am assisted in forming my judgment by the testimony of those who have taken both medicines. I have had intercourse with many of the most distinguished literary characters of this kingdom, who are conversant both with the appearance and properties of the French remedy; and they are *unanimous* in expressing their convictions that the two compositions are identically the same. When considering the question of identity, it may be useful to advert to the fact that one Wedelius, a continental physician, sold an empirical preparation of colchicum, which, like the French nostrum, was extolled as a panacea. This, indeed, is so very common with advertized medicines, that I should not think the circumstance worth notice, if the catalogue of its virtues did not bear some resemblance to that which we find in Husson's original advertisement. It is also deserving of remark, that the account of this nostrum is contained in a System of Materia Medica (by Geoffry) well known in France, where Huson lived.

In the hurry of drawing up this answer, I may have possibly omitted some particulars important to have been mentioned. Should this hereafter appear to be the case, I shall willingly resume the subject: at present I shall merely add, that my convictions respecting these medicines are unalterably fixed.

No. 9, North Crescent, Bedford-square.

JOHN WANT,
Surgeon to the Northern Dispensary.

* *Cartheuser Materia Medica*, vol. ii.

For

For the Medical and Physical Journal.

On the Influence of Air in Shut Sacs; by Mr. ASHFORD.

HAVING, during an attendance lately at a celebrated northern university, heard much of the pernicious influence of air, when admitted into cavities from which it is naturally excluded, not only at the different societies of students by which that school is so much distinguished, but also from the chair of the professor, I became insensibly interested in the subject. I could not fail to perceive, that, in the discussions which occasionally arose, both the favourers and the opponents of that doctrine dealt much in general assertions; that on both sides there was a remarkable deficiency of proof; and that, whilst on the one hand it was rather assumed than inferred, on the other it was contradicted rather than disproved. I resolved, therefore, to employ some leisure hour in an investigation of the grounds on which that opinion had been advanced and maintained. In offering to your readers some of the reflections to which the inquiry has given rise, I am not influenced by an idea that they contain any thing novel or important; I have solely in view the calling of the attention of your readers to an interesting and neglected subject, wishing to receive rather than expecting to impart information.

Whatever may be the fate of this letter, I shall not regret having entered on the question to which it points. That time cannot be considered as misspent, in which we have learnt to appreciate more highly a cautious and distrustful spirit of induction; and, to the medical observer, no lesson surely can be more instructive than that which he derives from an observance of the weakness of which all conclusions partake that are drawn from too hasty a comparison of facts. Such a lesson I think a perusal of Dr. Monro's Observations* on the Influence of Air on "shut Sacs" is well calculated to afford. Whether the doctor's work was the first in which the subject was regularly examined, I have not had leisure to inquire. I may, however, I think, safely infer, that nothing very conclusive had been advanced by his predecessors, for as it appears to have been a great favourite with the doctor, he would not have failed to avail himself of every fact which could countenance and support it. Indeed there is some appearance of a claim to originality in the suggestion, for there is a most ominous silence of the hint having been ever before stated. Petit, moreover, is accused of not having

* Monro on the Bursæ Mucosæ.

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been aware of it, as constituting a principal argument in favour of returning the hernial sac unopened, which Petit was the first to perform, and the doctor the most forward to advise. Yet, whoever will read what that excellent surgeon has written on the subject, will find it expressly mentioned. An error of this kind is certainly quite pardonable: not so, however, the failing to acknowledge it when pointed out. It is this which has drawn from Mr. Lawrence a reproof not more severe than well deserved.

The doubts by which this question is obscured, evidently arise from the difficulty which we experience in determining how far the effects consequent on the exposure of a cavity are referable to the air admitted, or to the wound by which the admission is allowed. In tracing the inflammation which is apt to follow such wounds, Dr. Monro took the greatest advantage of this uncertainty which it is possible to conceive. To the influence of atmospheric air he attributes the more tedious cure of compound over simple fractures; the inflammation which follows a puncture of the dura mater to the admission of air to the brain. In no other way could he explain how the thrusting of a red-hot poker through the pericardium should prove fatal; and in three cases of tympanitis, in the first of which the colon was eroded by dysenteric ulcers, in the second two pins were sticking through the jejunum, and in the third the colon was fairly ruptured, he attributes the fatal event to the air effused. We may all probably recal to our minds some instance in which a cause has suffered as much from its advocates as from its opponents, and we are, I think, here presented with another example of the fact.

The support which Lewenhoek's discovery of the presence of animalculæ in the semen gave to that theory of generation which supposed the perfect rudiment of the fœtus to exist in the semen of the male, and the process of evolution and nutrition only to go on in the female, is well known. Lewenhoek at first certainly described what he saw, but intoxicated with applause, he soon began to substitute the dictates of fancy for the impressions of sense, and proceeded to advance assertions which staggered even the credulity of that age. Thus he alleged that in a single drop of semen he could distinguish *numerous animalculæ of different sexes*. This absurdity opened the eyes and cooled the ardour of physiologists, and thenceforth they began to reason more closely. In like manner, it might have been expected, that the latitude of conclusion in which Dr. Monro had indulged, would have led to an investigation of the whole of the evidence on which the doctrine was founded; yet we find Dr.

Carmichael Smith echoing the same opinions without any apparent addition of facts.* Speaking of serous membranes, he says, "though not very sensible to the usual stimuli, they are affected in a singular manner by air, a stimulus which has little or no operation on other parts of the body endowed with the highest sensibility."

The rapidity with which inflammation is propagated in serous membranes from slight injuries, is certainly remarkable, and by superficial reasoners might well be considered as referable only to the general diffusion of a stimulus, such as air is supposed to be. I think it cannot be difficult to determine how far this is borne out by observation. If it can be shewn that the tendency to a spreading of inflammation takes place equally in cases of spontaneous inflammation (if I may be allowed the expression) as in those complicated with penetrating wounds, the conclusion against the doctrine is obvious, and I think inevitable. It cannot be necessary for me to refer to recorded instances for a proof of this property residing in them. Every practitioner's experience must have afforded him numerous examples of the fact. Is not the inflammatory blush extending over the surface of the intestines, a familiar consequence of enteritis? What is it that deters the surgeon from removing the hæmorrhoid by a ligature, but a dread of extensive peritoneal inflammation? Are we not all acquainted with the fatal consequences which have ensued from tying the whole spermatic cord after the operation of castration? To deny this property of serous membranes, is to prove oneself ignorant of the best-established fact in pathology. It is to peculiarity of structure then alone, that we are justified in referring the phenomenon in question. It is going out of our way to alledge the agency of air in the production of an effect to which it is clearly not essential. It is to multiply causes beyond the necessity of the case.

But the strongest arguments in favour of the innocency of air are drawn from an observance of the perfect safety with which an effusion of it is accompanied in cases of emphysema and tympanites. The experiments by Dr. Haighton† establish the same point. Taking advantage of the fact, that in some animals the communication of the tunica vaginalis with the abdominal cavity remains unclosed, he injected through it several cubic inches of air, by a puncture at the bottom of

* Medical Communications, vol. ii.

† See a paper on the Cæsarean operation in the "Medical Records and Researches."

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the scrotum, penetrating the tunica vaginalis—of a dog. Having repeated this experiment on several occasions, without any ill consequence, he says, "I do not hesitate to conclude that atmospheric air penetrating cavities is quite harmless." Now, I really should be glad to be informed on what grounds the contrary is still maintained. Have any subsequent experiments overturned Dr. Haighton's conclusions? Are they opposed by the result of any process of investigation equally free from objections, equally unequivocal and direct? Has their veracity been doubted? has their validity been disproved? or shall we never cease multiplying instances of the fact, that, as a theory may be advanced without proof, it may be *adopted without investigation, and persevered in, in spite of it*—Valent quantum valere debet.

August 8, 1814. ASHFORD.

For the Medical and Physical Journal.

On the Cow-Pox; by Mr. RICHARD WALKER, of Oxford.

IT will be apparent, that the contents of this paper were written at very different periods of time; the former part was written soon after the introduction of *vaccination*, and the latter, or concluding part, immediately before sending it to you.

The reader will perceive, in the course of this paper, an irrelevant kind of digression, which will be afterwards accounted for; and which, perhaps, may be not perfectly uninteresting. I have subjoined a summary view, in the form of a Table, of the ordinary progress of *inoculated small-pox*, which, with certain allowances, will serve likewise for *vaccination*, collected from a journal I kept of such cases.

The *cow-pox* I consider as a different modification, only, of the *small-pox*, and, though it may be, *ordinarily*, considered as a security against that disease, is yet less certain than the *small-pox* itself. The circumstances of the *small-pox* being incident to every person, and, ordinarily, *once only*, and the greater probability of an attack of the *small-pox* after the *cow-pox*, than a second attack of the former, I would attempt to account for thus. I consider every person as having the essence or innate principle of the small-pox originally in the system, which remains *dormant*, unless matured and put into action by an exciting cause, of which, *infection* is the usual one; and to which every individual is

so liable to be exposed, that no one has a reasonable expectation of escaping it.

Whenever the essence or innate principle of the disease is by any means put into action, it assimilates to its own nature a certain portion of the fluids, circulating in the system, more or less according to the grossness or purity of the habit, and throws out or expels them. If the whole of the original essence be expelled, or the system entirely purified of the disposition, which is ordinarily the case, the person will never be subject to a second attack.

The more complete the ferment or commotion in the system may have been at the time of the disease, the greater will be the probability of the whole having been thrown off, and *vice versa*.

Hence, although the cow-pox, properly passed through, may be a security *ordinarily* against the small-pox, yet, considering that persons pass through this disease, for the most part, without any eruption, and scarcely any discernible ferment or commotion in the system, I should be less surprised at an attack of the small-pox after the cow-pox, than a *second attack* of the small-pox itself.*

Since writing the preceding observations on *vaccination*, several instances have occurred, from unquestionable authority, (although a similar circumstance has not fallen immediately under my own notice,) of *natural small-pox*, in persons who had properly passed through *cow-pox*.

Although I am inclined to admit that these instances are too few to justify setting aside, or to invalidate the practice generally; yet it encourages me to mention a kind of prediction I made respecting the ultimate event of vaccination, at its introduction, so soon as I had ascertained the fact, as it then appeared to me, that no persons properly vaccinated need be apprehensive afterwards of an attack of small-pox. My opinion was, that, in consequence of the great satisfaction respecting security from inoculated *small-pox*, and in the present improved state of managing it, the little inconvenience or danger arising from it, compared with the insecurity after *vaccination*, arising from various causes, viz. the difficulty of procuring *fresh matter* at the *proper time*, and the probable failures and *mistaken security*, from its being imperfectly

* It has frequently occurred to me, what might be the effect of inoculating the cow with *small-pox matter*; whether such an experiment *has* been made, I do not know. This might have led to some further elucidation of the subject.

performed;

performed; my sentiments respecting it were, that at a certain period it would be found to be a greater evil than benefit to the community, and that ultimately it would be entirely abandoned.

At the same time I wish it to be understood, that, provided these difficulties were removed, and that *vaccination* could be universally adopted and practised; notwithstanding the credit which is due to well-authenticated cases of *natural small-pox* occurring after *vaccination*, yet such instances will ever be so exceedingly rare as by no means to preclude pursuing this practice in preference to *small-pox inoculation*.

The inoculated small-pox is occasionally so mild as to pass off in as light a manner as is usual in vaccination, viz. with scarcely any apparent indisposition, and without any eruption. I have a case of this kind, at the time of writing this, in which I transferred matter taken from a person very full of natural small-pox. The inoculated part came progressively on, and was a mature pustule, on the *eleventh day*. It is worthy of notice, that another child, in the same family, passed through inoculated small-pox in a similar manner.

It is well known, that the smallest portion possible of the matter* of the *small-pox*, or *cow-pox*, in an active state, communicated to the absorbent or inhaling vessels, is sufficient to produce either of those diseases; but it is prudent in either instance, especially when a minute portion of the matter is trusted to, that the *puncture alone*, with the infected lancet, be not trusted to, but that the lancet be likewise wiped clean, as it were, of the matter, over or into the puncture.† I should not have descended to this observation, had I not known of occasional failures, (in young practitioners chiefly,) in the communication of these diseases, particularly the *cow-pox*, requiring a repetition of the operation, attributable, as I apprehend, to a neglect or omission of the above precaution. I never, myself, in any one instance, ever failed in communicating either *small-pox* or *cow-pox* by the above method, with the application of *fresh matter;* but I cannot say the same of *dried or preserved matter*, however carefully moistened, at the time of application.

That a recurrence of the *natural small-pox* in the same individual has happened, is, I presume, unquestionable; but

* By the term *matter*, I mean the *essence* of the disease, whether it be in a *serous* or *purulent state*.

† My constant method of performing this operation is by grasping the under part of the arm so as to pull the skin above upon the stretch, by which the puncture is more readily made, and the matter more perfectly inserted.

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an instance of this kind is an exceedingly rare phenomenon. The circumstance of *natural small-pox* happening subsequently to *inoculated small-pox*, is less rare; and the occurrence of the *natural small-pox* after *vaccine inoculation*, it must be admitted, is still less rare. These facts seem to accord with, or to confirm, the principle I at first laid down. By the following statement, however, of the proportion of such cases that may happen in each instance, it will be apparent, that upon this ground even *vaccination* may be considered as so far removed from any apprehension of subsequent *small-pox* as not to enter into the mind of any person.

I think I may venture to consider the following statement as nearly correct, or at least perfectly within the limits, viz. a recurrence of the natural small-pox once in ten million cases; natural small-pox occurring after inoculated small-pox once in one million cases; and of natural small-pox after vaccine inoculation once in ten thousand cases.*

The above statement may be considered as correct, when vaccine inoculation has been duly performed, and the subsequent effects, viz. the *proper progress of the pustule in the inoculated part;* and the *constitutional effect on the system*, which, though so slight as not to be apparent, oftentimes to ordinary persons, nevertheless, constantly or generally precedes or accompanies the highest state of inflammation of the inoculated part in some degree, and is a certain criterion of the disease having been properly passed through. It must be observed, however, that the absence of this latter circumstance is no proof of the negative; but this is a point to be determined on by the practitioner alone.

Moreover, it has ordinarily or generally happened, that an attack of natural small-pox, succeeding or subsequent to vaccination properly passed through, has been of a mild nature, diminished probably by the previous effect on the habit of the latter disease. Had I an only child, or any person whose life was most dear to me, I should vaccinate it myself, provided such matter were to be obtained fresh. If, however, there were danger of such person taking the natural small-pox, and no fresh vaccine matter to be obtained, I should not hesitate to inoculate with small-pox matter, well knowing that by attentive management I could almost to a certainty avert or obviate danger, or even vio-

* Some persons might be inclined to think this statement respecting the *cow-pox* too favourable; the certain fact is difficult to be obtained; but I think I am justified by reason and observation in stating, that, under my own care, did such an opportunity present itself, I should make the disproportion considerably greater.

lence, in the ensuing disease. I shall briefly observe here, that, in addition to the means ordinarily known and directed for this purpose, I lay much stress on keeping the patient, especially about the time of sickening, and the commencement of the eruption till its completion, as near as may be, to one uniform cool temperature, taking especial care to avoid all sudden transitions of heat and cold. I have frequently been able to attribute a load of pustules to a cause, I believe, but little thought of or attended to, viz. the circumstance of the patient, after having been exposed to cold air, particularly in the winter season, coming suddenly into a warm or rather a hot room, by which means the system becomes preternaturally heated, and excited by re-action.

So long, therefore, as vaccine matter is to be obtained in a proper state for inoculation, and the practice continued to proper persons, the mode by vaccination is unquestionably to be preferred; but from the difficulty of obtaining at present, even now, whilst the ardour for propagating this disease, inseparable from novelty, excites exertions, but which are far short occasionally of being adequate to the extraordinary call for it; I am apprehensive that my prediction before-mentioned may be in danger, at some future period, of being verified.*

It will be apparent, that the prediction above-mentioned was made soon after the introduction of vaccine inoculation. The prevention of its being fulfilled, as I heartily hope it may, will depend upon the continued zeal of the public in general, and the constant exertions of the faculty, viz. the general acquiescence of parents, and the zeal of the faculty in keeping up a constant supply of good matter; together with attention in communicating the disease, and watching the progress of it. For some time since small-pox in Oxford and its vicinity has become a rare occurrence.

I have lately met with a veteran in the profession, still retaining his proper judgment in other professional matters, who is still such a tenacious adherent of the old school, as to declare it to be his opinion, that every person is as incident to small-pox after vaccination as before, viz. that vaccination is of no avail whatever in preventing small-pox! Upon questioning him upon what data this opinion was founded, he declared he never had inoculated with vaccine matter,

* The confined nature of cow-pox, comparatively with that of inoculated small-pox, for furnishing matter, this being to be obtained from the inoculated part only, renders it necessary occasionally to send to London for it; from this cause failures likewise will sometimes arise, in consequence of the matter not being fresh.

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and that he never would; and, in fact, that he had never seen the cow-pox!

This is carrying prejudice against any novel mode of practice evidently too far. It is true my own experience has very much diminished my faith of its efficacy, from the same cause, I presume, which, as it appears, had previously entirely worn out the faith of the above-mentioned gentleman.

I am not surprised that any experienced practitioner should, at the first introduction of so extraordinary a novelty in practice as vaccination, being at the same time unacquainted with the established fact, that persons taking this disease from the cow, were rendered incapable of taking small-pox, should at first withhold his assent; but that such an unqualified dissent, in contradiction to the present general opinion, should at this time exist in the mind of any practitioner, excited my astonishment.

Oxford, Aug. 4, 1814. S. WALKER.

(The Editors have been obliged to postpone the remainder of this Article, which will be continued in our next.)

For the Medical and Physical Journal.

On the poisonous Effects of Meadow Saffron in Cattle.

A STATEMENT has appeared in one of the morning papers, of some yearlings having been killed by the eating of colchicum. This account is evidently a fabrication, as at this season of the year no part of the plant is above ground, and, consequently, not within their reach. I am indebted for this fact to Sir Joseph Banks, and Mr. Andrew Knight, the president of the Horticultural Society; and to the latter of these gentlemen for some particulars on this subject, which are of sufficient importance to communicate. Cattle are affected by the meadow saffron *only* at the spring of the year, when the seed-vessel is fully mature. It appears that the seed, if swallowed, adheres to the coat of the stomach, producing at the several points of its adhesion spots of inflammation, which occasion the death of the beast. It is a curious fact, that they are affected by the recent plant *only*; for, when dried and made into hay, it loses its deleterious property, and is then eaten by them with impunity. Whether, if taken in great quantity, it might not still be poisonous, has not, I believe, been determined. I am disposed to account for the peculiar effect of the seed, from its property of adhering to the coat of the stomach; this *may* be lost in the dried state, by which it is enabled to mix with, and is diluted by, the food. J. WANT.

COLLECTANEA MEDICA,

CONSISTING OF

ANECDOTES, FACTS, EXTRACTS, ILLUSTRATIONS, QUERIES, SUGGESTIONS, &c.

RELATING TO THE

History or the Art of Medicine, and the Auxiliary Sciences.

Case of Hydrophobia which terminated fatally. By Mr. H. MARSHALL, Surgeon, Colombo, Ceylon.

MONDAY, the 27th April, a favourite little spaniel dog, belonging to Mr. D. was bitten by a dog running along the street where he resided. On the 2d May, about 9 A. M. Miss D., a young lady about fifteen years of age, was, without giving any provocation, bitten by her father's spaniel. The teeth of the animal penetrated the skin of the palm of the right hand, and lacerated the flexor muscles of the thumb. During the course of the same day, this dog bit also three of Mr. D's servants. The dog was observed to eat and drink as usual, until the evening of the 3d, when he was confined, although nothing alarming had then taken place in his appearance, nor was his manner observed to be materially changed. On the morning of the 4th, he very evidently evinced symptoms of uneasiness, which the spectators, with too much reason, suspected were indications of madness: meat and drink were now refused. He died on the same day about one o'clock.

The lacerations in the hand of Miss D. were dressed with blistering plaster, and occasionally a few drops of eau de luce were exhibited. On the 4th May, about noon, I was requested to visit her. At this time, I removed the lacerated skin and muscles; her hand was immersed in warm water for nearly an hour, and then lunar caustic was liberally applied to the whole extent of the wound. Two of the servants who were bitten were treated in the same manner; the third had caustic only applied to the wounds; as he had received the injury in the groin, too near the large blood-vessels to render an attempt at complete excision adviseable. The following day I visited the family of Mr. D. when my attendance for that time ceased. Miss D. was daily visited by a native practitioner, and, from his narrative, together with her father's information, I have collected the following particulars.

Caustic was occasionally applied to the wounds, until the 15th May. She commenced to take calomel on the 20th, and continued that medicine until the 3d June. Salivation was quickly produced, and continued for a considerable time after she ceased to take calomel.

On the 9th May, the catamenia appeared, and they recurred on the 14th June: this day she was very unwell, and complained of great languor—in the evening she took some chamomile tea, which operated powerfully as an emetic. She perspired profusely during the greater part of the night. On the 15th, she came to the break-

fast-table, but had no appetite, and ate nothing. When water was brought to her to wash her mouth, she was observed to tremble. About noon, some arrow-root was dressed, which she requested should be given to her in a coffee-cup, and not in a glass, as her friends intended; she shivered strongly when she saw the arrow-root. She succeeded, however, in swallowing a little of it, although with infinite difficulty. At dinner she ate a little, but now very evidently shuddered when water was brought to her view. She swallowed a little tea, and ate a small portion of bread, about five P.M. At seven she swallowed a little coffee; in an hour after, she perspired very profusely, and complained of great giddiness. Between nine and ten o'clock, the doors of her room were opened to admit more air; she instantly complained of the current of air giving her great uneasiness, and begged to be removed from it. She often attempted to sleep during night, but was almost instantly awakened by frightful dreams, hastily starting up, trembling, and shivering. About three A.M. she complained of a sensation of extreme heat in her throat and belly; the giddiness at the same time continued unabated. At her own desire, water was brought to her bed-side to bathe her feet; on her perceiving it, she shuddered strongly, and turned from it as if terrified. In a short time, she so far conquered her aversion to water, as to place her feet in the tub for a few minutes; for a little time she thought the giddiness relieved. I was called to visit her on the morning of the 16th, and reached her house about half past seven o'clock, where I was soon joined by Drs. Anderson and High. We found her sitting on a bed in a reclining position, supported by pillows, and her arms placed across her body. The muscles of the face were frequently convulsed, and the angles of the mouth occasionally drawn back. Her eyes were glassy, and at intervals fixed with a wild unmeaning stare. The collection of saliva in the mouth gave great uneasiness, although it was partially expelled by expiration in a state of foam. Every three or four minutes the viscid phlegm seemed to irritate and throw into convulsions the muscles of the throat, when she exerted her whole force to expel the offending fluid.

The skin was covered with perspiration; it ran over the face in drops. Her pulse was about 100, and sharp. Her respiration was hurried and unequal. The countenance expressed great anxiety; occasionally it indicated extreme agony. She sometimes glanced her eyes through the room; while her countenance expressed a suspicious watchful dread of some impending evil. Except when the irritation and spasms of the muscles of deglutition occurred, the chief uneasiness she complained of was a painful sense of heat in the throat. The giddiness of the head also continued to trouble her. In general she seemed unwilling to speak, and when she attempted it, the tongue faltered, the lips trembled, and her lower jaw did not readily obey the will. Her speech was consequently hurried, and not always very intelligible. She seemed sensible and perfectly conscious of what was passing around her; she expressed an earnest desire that her father and sister should remain constantly by her. At her own request, a little

little rice was brought, of which she swallowed a small portion, but after an extremely painful exertion of the muscles of the throat. On hearing one of us express a wish to see water brought into her view, she readily complied, and showed great willingness to gratify us, although she was evidently afraid to make the trial. She even put a cup which contained some water to her lips, and attempted to swallow a little, which was instantly rejected with great force by the spasmodic constriction of the muscles of deglutition; this attempt was also accompanied with general convulsions. When water was brought in her view a short time after, she turned from it, with a countenance expressive of horror.

When the hand was examined, it was found that the wound was perfectly healed, leaving a slight eschar in the skin, but without induration or tumefaction of the parts under it.

She was bled in the right arm by a large orifice, and the blood permitted to flow until faintness was produced; the quantity of blood taken away was about twenty-four ounces. Soon after the vein was opened, she very intelligibly expressed herself generally relieved; particularly of a heaviness and giddiness of the head. The spasms of the muscles of the throat were evidently less violent, and also much less frequent; her countenance became comparatively placid and natural. Before the vein was closed the pulse was so weak as scarcely to be felt at the wrist. During her state of faintness, a vial containing eau du luce was applied to her nose, which instantly produced strong involuntary actions of the muscles of the throat and face.

In about ten or fifteen minutes after the arm was tied up, the morbid symptoms returned, with increased violence; debility supervened rapidly. An enema, with four drachms of the tinct. of opium, was now exhibited. Shortly after, she was suddenly seized with a severe pain and sensation of burning in the regions of the epigastrium and umbilicus, in consequence of which she shrieked out in great agony. She continued to scream for about twenty minutes, and then became suddenly quiet. A warm bath having been previously prepared, she was now put into it. She expressed no horror either at the sight of the water or on immersion. After being removed from the bath, she was put to bed. The system now seemed extremely relaxed and debilitated; the pulse could not be felt at the wrist; the pupils of the eyes were dilated, the countenance was sunk, and the skin covered with a cold perspiration; foam was no longer formed at the mouth, —probably the power of swallowing returned. Her breathing was hurried, and accompanied with a convulsive sob. At a quarter past nine A. M. she expired.—*Edin. Med. and Surg. Journal.*

Case of Tic Douloureux, cured by the external use of Tar. By Mr. E. COLVILLE, Surgeon, Ayton.

Mr. J. L. consulted me on the 8th of September last, on account of a severe pain in the left cheek and temple. It began about four years before that, without any apparent cause, and continued, with very little intermission. It seized him in paroxysms, which at last came

on every three minutes. Whenever he attempted to eat or drink he was seized with dreadful pain; the tears gushed from his eyes, and he involuntarily pressed the part with both hands, with as great force as he could. He was deprived of his rest during the night; and in consequence he felt himself very feeble and frequently sick. His belly has been pretty regular, but when I saw him he was rather costive. He had been of very regular habits all his lifetime; his age about 72 years.

As his pulse was rather quick, I took eight ounces of blood from the left temporal artery, gave him some doses of sulphate of soda, to take one when necessary, and pills, each containing one-fourth of a grain of white oxide of arsenic and half a grain of extract of hyoscyamus, one of which he took evening and morning, and an embrocation of tinct. sapon. c. opio, to rub on the pained parts, and drop into the ear. I saw him again three weeks after. The pain was not in the least degree relieved, except for a few minutes after he dropped the tincture into the ear. The sickness had also been in a great measure relieved, which he attributed to having taken the salts regularly. By his own desire I extracted three stumps from the lower jaw; and, as the pills seemed to have had no effect, I ordered them to be discontinued. I ordered him to take a dose of salts every third day, and did not see him again until the end of October. His health was then pretty good, but the pain not in the least abated. I proposed the operation of dividing the nerve, which he would not agree to on account of his age.

I saw him again on the 9th of February this year, and was surprised to find him quite well. He told me that, in consequence of his daughter having found great relief from tar as an external application to rheumatic pains in several parts of the body, by my recommendation he was advised to try it for his disease, which he did about the beginning of January. He rubbed a little upon the cheek and temple for three nights successively. He felt no relief from it the first night; on the second the pain was rather easier; and, on the morning after the third rubbing, the pain was quite gone, and he has never had the slightest paroxysm since, and is as well as he has ever been in all the course of his life. I think there can be no doubt that this was a case of Tic Douloureux. The pain indeed extended further upon the temple than it generally does; but all the symptoms taken together make the case quite plain. It attacked in paroxysms, which were always severest when he attempted to eat; great nervous irritation; pulse a little quickened; face frequently flushed during the paroxysm; the muscles of the mouth frequently contracted, causing considerable distortion of the face on the left side, &c. I should be happy to hear if any gentleman meets such a favourable result from a trial of the remedy.—*Edin. Med. and Surg. Journal.*

Case of Rheumatism of the Heart. By J. PENKIVIL, Esq. Surgeon, Plymouth Dock.

Mrs. W. a thin delicate woman, about 50 years of age, was seized with general symptoms of pyrexia, as I learned from her friends

friends, a few days before I was sent for. On my first visit, I found her much prostrated in strength, her skin having febrile heat, the pulse rather below the standard in point of number, yet remarkably full, with a vibrating wirey throb, conveying the idea of inflammatory action. The tongue was white and coated; the bowels rather costive; the ankles were swelled and painful, though not red; the knees were much more swelled, and so painful, that she could not bear the slightest touch without crying out; but the most distressing symptom was an excruciating pain over the left temple, with violent throbbing and a hissing noise, which rendered her deaf on that side. The remarkable prostration of strength, in a frame otherwise very delicate, deterred me from having recourse to general bleeding. I therefore preferred local bleeding, by leeches applied to the painful temple, and a blister applied to the back of the neck. As it was then night, I ordered a sudorific draught to be taken immediately, and a dose of purgative pills to be taken early the next morning; sinapisms were also ordered to the painful joints. The next day she experienced some relief from the remedies applied to the head and temples; but the joints of the inferior extremities continued equally painful, and those of the superior began to take on a similar action, particularly the hands. The opening pills, which had produced their usual effect, were repeated; powders, with potass. nitrat. were ordered three or four times a day, together with antimonials, and the joints affected rubbed with ol. camph. This plan was followed, in a few days, with an alleviation of some of the symptoms, but an aggravation of others; the joints of the inferior extremities grew better, whilst those of the superior became worse. The violence of the pain of the temple, it is true, was somewhat abated; but the hissing noise remained, though I think she was not quite so deaf. Great watchfulness now supervened, with remarkable anxiety at the præcordia, so that I found it necessary to exhibit an opiate combined with an antimonial at night; the powders were changed for a camphorated mixture, to which was added some liq. ammon. acet. given every fourth hour. A little more rest and ease was procured in consequence of this alteration; but now the complaint, which so far may be considered to have been purely rheumatismus acutus, with the addition of the peculiar affection of the left temple, assumed a change of symptoms. The inflammatory action seemed to fly, as it were, from the circumference to the centre. The heart and arterial system became peculiarly affected; their pulsations were slower than natural, but remarkably full and violent, so that the action of the carotids could be seen almost at any distance of the room, and when the hand was applied to the region of the heart, it seemed by its force to be lifted from the part. This violent action was now and then followed by a sudden collapse, consequent faintings, and slight twitchings. It will be expected now that the pain of the temple, and the hissing noise from the force of the carotids and temporal arteries must have been increased. The case assumed a serious aspect. I therefore drew about ℥xvi. of blood from the arm, and

and the bowels being previously well purged, ordered an anodyne sudorific draught. The next morning the assistance of Dr. Woollcombe was requested. The blood appeared somewhat, not particularly, sizy, but certainly the patient was relieved by its extraction. The doctor's attention was particularly struck by the violent arterial action, and, on turning down the bed-clothes, our patient being very thin, the systole and diastole of the abdominal aorta were evident to the eye. He was equally surprised at the slowness of the pulsation, which at that time was not much above 40 in a minute. Having recommended the left side of the head to be previously shaved above the painful temple, he ordered a blister to be applied there, and prescribed an eight-ounce mixture, similar to that I had previously sent, but adding to it 3 i. vin. antim. tart. of which a fourth part was to be taken every sixth hour, with a powder containing xv. gr. jalap, until the bowels were freely opened. A draught, with æther t. lav. c. and t. opii was to be given at night after the operation of the powders, especially should the watchfulness continue. The next morning, the pain of the temple was much relieved by the application of the blister, and the general arterial action was moderated, perhaps by the blood previously drawn, but also, I think, by the purgatives and vin. antim. tart. now prescribed. As the action of the heart and arteries had a little subsided, so their pulsation had risen a little nearer their standard. Indeed it is observed, that the pulse gained in velocity what it abated in force, gradually, as the patient recovered, approaching the natural standard. Following this plan of treatment, Mrs. W. in the course of a week, was convalescent, every symptom vanishing, together with the deafness, except slight stiffness and occasional shootings in her joints, which in another week or two left her; and I have lately had the pleasure of seeing her in perfect health.—*Edin. Med. and Surg. Journal.*

Report of the Progress of the Sciences in France in 1813; by J. C. DELAMETHERIE.

Chemistry.—In the chemical analysis of animal substances Berzelius has made great improvements. He has submitted the animal fluids, and particularly the blood, to new analyses. The blood, he says, is composed of two parts; a liquid, the *serum*, and one which is suspended, the *coagulum*. In the animal œconomy we ought to distinguish three principal substances: *a*, fibrine; *b*, albumen; *c*, gelatine.

The serum according to Berzelius, is a solution of a great quantity of albumen with a little *fibrine*. Both are combined with soda. It also contains some other saline substances.

The coagulum is the colouring matter. It differs from albumen in its insolubility in serum, and by its colour. The colouring matter amounts to about one-third of the mass: the colour seems to be owing to iron, of which it contains about one-third of its weight; but this iron can be separated by combustion only.

This colour cannot be produced artificially by uniting albumen

with subphosphate of iron, as Fourcroy and Vauquelin have asserted. Nor is it possible to produce it by uniting iron with soda, as Parmentier and Deyeux have supposed.

We may compare the colour of the blood to the other red colouring principles formed by animals, cochineal, kermes, the purple of the murex, &c.

Four hundred grains of colouring matter, when incinerated, yielded:

	Grains.
Oxide of iron	30·
Subphosphate of iron	7·5
Phosphate of lime and a little magnesia	6·
Pure lime	20·
Carbonic acid and loss	16·5

The serum of the blood gave upon analysis:

Water	90·5
Albumen	80·
Muriate of potash, soda, and lactate of soda	4·
Soda, phosphate of soda, and a little animal matter	4·1

In speaking of the lactate of soda, Berzelius observes, that the existence of the latic acid discovered by Scheele had been erroneously doubted by Fourcroy and Vauquelin. The blood containing no gelatine nor earthy phosphate.

The fibrine, albumen, and colouring matter resemble each other so closely, that they may be considered as modifications of one and the same substance: they give earthy phosphates and carbonates of lime solely when they are decomposed.

The author thinks that the phosphate of iron does not exist in the non-decomposed colouring matter, and that which we obtain by incinerating it is a product of combustion.

The colouring matter dried and exposed to the fire in a red-hot crucible melts, swells, and burns with a clear flame; it leaves a pory charcoal, which burns with difficulty. In burning, a smell of ammonia is constantly exhaled, although it had been exposed several times to a strong fire.

This extrication of ammonia from a burning charcoal, and which has been long exposed to the fire, is according to him a remarkable phænomenon: hence he concludes that this ammonia is a new product.

On the Extrication of Caloric during the Coagulation of the Blood; by JOHN GORDEN, M. D. F. R. S. E. and Lecturer on Anatomy and Physiology, Edinburgh.

Edinburgh, July 1, 1814.

MY friend Dr. John Davy, in his interesting thesis (Quædam de Sanguine Complectens) printed here last month, has alluded to an experiment of mine, relating to the extrication of caloric during the coagulation of the blood, which I have been accustomed to mention in my anatomical and physiological lectures for three years back.

back. In the lectures on physiology which I delivered during the three summer months of last year, the limited period of the course did not permit me to dwell so long on that, nor on many other subjects, as I could have wished. To this, I doubt not, it is to be attributed, that the experiment referred to has been in some degree misapprehended by Dr. Davy; and, if by him, who honoured me with the most flattering attention during the whole of that course, I fear also by many other of my pupils.

The following, however, are the notes relating to this subject, from which I then read:—

"As it is a fact established in chemistry that the conversion of a fluid into a solid is always accompanied with an extrication of caloric, one could have little doubt, even if the fact were not made evident by experiment, that the caloric is extricated during the coagulation of the blood.

"Fourcroy had stated it, as the result of experiments made by him at the Paris Lyceum, in 1790, that during the coagulation of bullock's blood as much caloric was given out as raised the thermometer (Reaumur's I presume,) five degrees. (Ann. de Chimie, t. vii. p. 147.)

"But more authority seems to have been attached by physiologists to the following experiment of Mr. John Hunter. Mr. Hunter having suspended a healthy turtle by the hind legs, cut off its head, and caught the blood in a bason. The blood while flowing was 65°, and when collected was 66°, but fell to 65° while coagulating, which it did very slowly. It remained at 65°, and when coagulated was still 65°. From this, and similar experiments, Mr. Hunter concluded that in the coagulation of blood no heat was given out. (Treatise on the Blood, &c. 4to. p. 27.)

"A very different result, however, has since been obtained by the author of a short article on the blood in Rees's Cyclopædia. Ten ounces of blood was drawn into a wooden bowl, in which a thermometer was held. The temperature of the blood while flowing from the vein was 98°. In six minutes the thermometer had sunk to 89°, and coagulation commenced on the surface. On elevating the bulb of the thermometer to the coagulum on the surface, the mercury rose to 90½°, and on again depressing it to the bottom of the bowl it sunk to 89°. This was repeated twice, with nearly the same result; and on the third trial the quicksilver rose to 91°. The blood was now coagulated throughout; and, after this, the mercury continued to descend regularly, and was no longer influenced by changing the situation of the bulb of the thermometer. In this experiment it clearly appeared that during the coagulation of the blood caloric was extricated; and in sufficient quantity, at one time, to raise the thermometer 2°.

"As it was desirable to confirm this result, and, of course, that before obtained by Fourcroy, both so conformable to analogy, my friend Mr. Ellis and myself, in presence of Professor Thomson, performed the following experiment, in the month of April, 1810:

"Blood was received from the femoral artery of a dog, into a small

small glass jar. The temperature of the blood flowing from the artery was 99° Fahr.; and that of the apartment, during the experiment, 46° Fahr.

"One minute after the blood had been received into a vessel, it began to coagulate, by a film on the surface. The bulb of a very delicate centigrade thermometer was now placed into the blood at the upper part of the vessel, and held there during a minute, without touching the sides of the glass. It was then depressed to the lower part of the vessel, where coagulation had not begun, and held there in the same manner during the next minute. During the next it was held at the top, and during the next at the bottom; and so on, it was alternately elevated and depressed for 20 successive minutes after coagulation had begun on the surface.

"When the bulb was first placed in the blood at the top, the mercury gradually rose to 34°; but, when it was depressed towards the bottom, it instantly fell to 30½°. When again elevated, it rose to 33½°; and, when again depressed, sunk to 30°. A third time brought to the surface, the mercury rose to 32°; and a third time depressed, it fell, in half a minute, to 28$\frac{5}{10}$°. At the next elevation the mercury rose to 31°; and at the succeeding depression, fell to 28½°. At 18¼ minutes after the blood had been drawn, when the bulb of the thermometer was brought from the bottom towards the top, the mercury rose from 24° to 25½°. It was now held at the top for two minutes, and the mercury gradually fell to 24°. The blood seemed now completely coagulated, and the experiment was discontinued.

"In this experiment, therefore, the extrication of caloric during the coagulation of the blood was rendered sensible by the thermometer for 20 minutes after the process had commenced; and was at one period so great as to raise the thermometer, in this cool apartment, 3½° of the centigrade scale, which is equal to 6·3° Fahr.

"That a similar extrication of heat was not apparent in Mr. Hunter's experiment on the blood of the turtle, may have been owing to his not having placed the bulb of the thermometer alternately in the coagulating and yet uncoagulated part; and partly, perhaps, to the slowness with which he informs us the process went on.

"We may regard it, therefore, as established, that, when part of the blood thus spontaneously passes from a fluid to a solid state, caloric is extricated, in the same manner as when other fluids undergo a similar change."

Farther than this, my notes did not then extend.

But during last winter I had an opportunity of trying this experiment several times, on venous blood drawn from persons labouring under inflammatory complaints, and the result was always precisely similar. The following is a note of one of these experiments:—

Jan. 22, 1814. I received three ounces of blood from the median vein of a man, aged forty, labouring under pneumonia, into a

tall glass vessel, and immediately introduced into it a delicate Fahrenheit thermometer, the bulb touching the bottom. The temperature of the blood in this situation was 76°. In two minutes fluid size collected at top; and in two more a very thin film appeared on the surface of this size, and the thermometer was then exactly 74°. In four minutes more, that is, eight minutes after the blood had been drawn, a soft coagulum was formed to the depth of an inch from the top, and the thermometer (the bulb being still at the bottom) was 73°. I now raised the bulb smartly into the middle of this coagulum, and instantly the mercury rose to 85° (that is, 12°); and when I depressed it again to the bottom, where the blood was still fluid, the mercury immediately sunk to 73°. I repeated this several times with similar success. The temperature of the apartment during the experiment was 55°.

I have tried this experiment again, within these few days, on blood drawn from the arm of a middle aged man, labouring under an affection of the heart, and the result was similar.

On carefully reviewing all these experiments, I cannot discover any source of fallacy connected with them, which should lead me to hesitate in deducing from them the same conclusion as formerly, viz. that caloric is extricated during the coagulation of blood, and therefore that the blood is no exception to the general law applicable to all other fluids in this respect.

That my friend Dr. Davy has been led to adopt an opposite opinion in consequence of his experiments on lamb's blood, has obviously arisen from his not having been aware of the importance of moving the thermometers in his experiments;—a circumstance for a knowledge of which I am myself entirely indebted to the anonymous author already referred to in Rees's Cyclopædia; and a circumstance, I may add, which, unless it be scrupulously attended to, is calculated to render all experiments made with a view to ascertain the temperature of blood after it has been drawn from the vessels, altogether inconclusive. At the same time, I cannot help observing, though with the utmost deference to one so much more familiar with chemical details than I am, that, taking Dr. Davy's experiments as they are, they rather seem to me to warrant an opposite conclusion to that which he has drawn from them; and that, upon the whole, they rather tend to confirm than to disprove the extrication of caloric during the coagulation of the blood.—*Annals of Philosophy.*

CRITICAL

CRITICAL ANALYSIS

OF RECENT PUBLICATIONS

IN THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

Observations on the Nature and Treatment of Consumption; addressed to Patients and Families. By CHARLES PEARS, M.D. F.L.S. &c. &c. 8vo. pp. 63. Highley and Son, 1814.

A BOOK may be bad in two ways: it may, by a specious title, induce people to read it, who go on from page to page, hoping the next may turn out better, till they happily arrive at the end, and then find they have lost their time; it may be bad from the errors it contains, and the wrong principles which it promulgates. We conceive the work before us offends in both these respects. All the information in it is taken from writers whose works are much better known than can ever be the fate of this publication, while that portion which the author may claim as being peculiarly his own, is calculated to mislead weak persons, and bias uninformed minds with fatal prejudices in the treatment of a most universal and destructive disease. To medical readers it will only prove injurious from taking up their time; to the public it may occasion the most serious mischief, and on that account we do not shrink from noticing it.

We doubt not the author has seen the disease, he appears to have read upon it, and we will not dispute his opinion respecting the causes which influence it, nor differ with him in considering it as a disease of debility. But here we stop; he has chosen to omit altogether any notion of the disease ever being in its commencement of an inflammatory nature; he seems to have taken his stand nearly at the termination of the complaint; he has confounded the symptoms together in one general mass, which he calls debility, and triumphantly asks, "How then can debilitating means ensure recovery?"—"Is an *increase, continuance,* and *extension* of those means which have induced the disease, a very probable or natural mode of removing it?" He continues in this strain, enumerating symptoms evidently in the last stage of the disorder, and supposing that practitioners really do pursue the most debilitating plan of treatment, bleeding and starving the patient to death. This conduct requires little comment, the author must know, if he has not forgotten, how carefully practitioners attend to the progress of consumption; how frequently they effectually ward off the first attack, by the very means which he so unbecomingly deprecates; how minutely they measure their practice by the symptoms which occur, or which their sagacity anticipates, and that they never either bleed or starve their patient after the suppurative process has commenced; and if they

ultimately fail, at least they often have the satisfaction of mitigating the patient's sufferings, and prolonging his life.

The author confidently informs his readers, that "only those recover who have (most wisely and consistently) *disobeyed* the rules by which they were to have been confined." We hardly need state the remedies which Dr. Pears recommends in pulmonary consumption; but in justice to him, and to our preceding observations, we cannot avoid stating the more prominent part of his treatment, which he so strenuously urges. The patient is carefully to avoid milk, and especially asses' milk, it being too weak; and he is by no means to drink weak liquids at any time. But the food is to be of the most nourishing and invigorating kind: "animal food, strong broths, and beef tea, poultry, game, wine, fat, and what is called rear or underdone meat, are the most nourishing and proper; spices, if agreeable, and pickles. Salt and savoury meats may be allowed, and are frequently required by the stomach."—"I (Dr. Pears) frequently find it necessary to allow and order a sandwich of ham, anchovy, red herring, &c. even in the night. The stomach will and does retain this food, when all other is rejected. Also onions, (or a beef-steak and onions,) stewed oysters, &c. with brown stout, or wine."—Wine and water, common draught or bottled porter, good mild ale, home-brewed, and not too new or fermentable, may be drank in general, with the occasional or moderate and regular use of wine, (especially tent-wine,) in small quantity. If they should appear to disagree or excite coughing, (as *every* liquid will sometimes do), repetition and perseverance will soon overcome the difficulty, and prove the advantage thus gained." Between whiles the patient may take an egg beat up with wine, sugar, and milk; in short, the stomach is to be "gradually invigorated by constant but not laborious employ."

Amongst all this cramming there is little room for medicines; and as the author dispatches them in about a page, we suppose he does not place much confidence in any which he has tried; they consist of course in those of the "*cordial, bitter, and tonic kind.*"

Evacuations are reprobated; "of these BLEEDING is the *worst!* When patients are BLED, *their death-warrant is signed with their own* BLOOD."

"When the symptoms arise from *internal* bleeding, as from the nose, lungs, &c. the *same* treatment must be pursued. Avoid *bleeding!* If loss of blood would cure, the very cause of the disease would *prevent* its existence."

Such are the opinions of this author upon the treatment of consumption, which he says are supported by cases already published, the plan being first tried upon himself; "and its success warranted the practice, which has been ever since adopted with an effect beyond every other. He enumerates, amongst his titles, that of "*late lecturer on the structure and management of the human body.*" We presume the want of an audience occasioned the epithet *late* to be prefixed; and, if his discourse upon anatomy was no better than

this

this farrago about consumption, we should conclude he was a disciple of the famous Du Cerf, who offered a celebrated lecturer on anatomy a sum of money for his situation. The professor shewed Du Cerf a bone (an os femoris) which the latter could not name. "How then," said he, "dare you pretend to the first anatomical chair in the kingdom?"—"Oh, sir," replied Du Cerf, "that is nothing; it will not prevent my making a very fine harangue upon it."

An Essay on the Venereal Diseases which have been confounded with Syphilis, and the Symptoms which exclusively arise from that Poison; illustrated by Drawings of the Cutaneous Eruptions of true Syphilis, and the resembling Diseases. By RICHARD CARMICHAEL, M.R.I.A. President of the Royal College of Surgeons in Ireland, and one of the Surgeons of the Lock Hospital, Dublin. 4to. pp. 121. 1814.

THE importance of the subject of the tract we are about to notice, is too evident to be disputed; and the attention of the profession has been already called to the discrimination of the various diseases which present themselves on the organs of generation, by Mr. Abernethy and Mr. Hunter. The present essay introduces a somewhat novel distinction between syphilis and *venereal* diseases, which, however correct in fact, may lead to some confusion, in so much as they have been considered as synonymous terms. The general plan and purport of the book will be best explained by the author in the following advertisement. The plates in illustration of his cases should have accompanied the work, and perhaps the author and the public might have waited for them, but they will be given in the continuation of the work.

"The object of the following treatise is chiefly to elucidate an important class of diseases hitherto confounded with syphilis, but to which the attention of the profession has of late been attracted by Mr. Abernethy; and it will be satisfactory to state, in the first instance, the opportunities which conduced to enable the author to investigate a subject requiring a very ample field of observation; and, in the second place, to make the reader acquainted with the manner in which that investigation was prosecuted.

"The Lock Hospital of Dublin is probably the most extensive institution in Europe, for the exclusive reception of patients affected with venereal diseases. It is supported by government, and, in general, contains from two hundred and eighty to three hundred patients. The hospital is visited daily by five surgeons, each of whom attends his allotted wards; but the entire institution is, of course, open to the observation of all; so that each has the advantage of witnessing any peculiar or interesting case which may occur in this extensive institution.

"The manner in which the investigation was prosecuted, was on the most

most simple plan. Whenever a primary ulcer on the genitals occurred, which was destitute of the characteristics of chancre, *the hardened edge and base*, it was treated without the exhibition of mercury; and the same system was pursued in those cases of constitutional symptoms which had a doubtful appearance. *The scaly syphilitic blotch*, as described in page 129 of Willan on Cutaneous Diseases, and the *excavated ulcer of the tonsil*, as described in page 482 of Hunter,* were alone esteemed to be syphilitic, and treated with mercury.

"As to the affection of the bones: Whenever a patient complained of *nocturnal pains in the shafts of the long bones, or had a decided node or enlargement of the bone*, his disease was esteemed syphilitic, and the use of mercury adopted; but, if the patient merely complained of pains in his joints, or if there was an indication that the coverings of the bone only were affected by an inflammatory swelling, of a doubtful character, an occurrence which was not unfrequent, the employment of mercury was postponed, until the nature of the disease manifested itself by indubitable syphilitic appearances.

"All the cases which did not coincide with these appearances, were carefully noted in the following manner:—

"1st. The appearances on the patient at his admission were marked down; his statement of his complaints, as far as could be collected from him, previous to his admission, was added; and, lastly, the progress and treatment of his disease were noted, in general but once in a week, but oftener, if the symptoms required any change of treatment.

"The cases were noticed before an intelligent class of pupils, and the information contained in the following work, was detailed in general and clinical lectures during the two last winters, in which the nature of the diseases, that have been confounded with syphilis, were elucidated by a frequent reference to the noted cases, and the pupils had opportunities of observing every variety of the symptoms of these diseases on the patients themselves in the hospital, and of contrasting them with those of true syphilis.

"As a number of isolated facts can only acquire importance by leading to general conclusions, so it will be necessary in this work, in order to render it useful, to take a short view of circumstances already known. In the first instance, therefore, a brief view is taken of some morbid poisons, which stand in nearest relation to venereal diseases; under which denomination are included all complaints propagated by sexual intercourse: and the term syphilis is restricted to that disease supposed to be brought to Europe by the followers of Columbus, about the conclusion of the fifteenth century. The symptoms of syphilis are next adverted to; and afterwards, the more immediate object of the work is entered on at large. By

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"* The edition edited by Dr. Adams is referred to in this work."

which

which preliminary matter, the nature of the pseudo-syphilitic diseases, as they are termed by Mr. Abernethy, and the relation in which they stand to syphilis, and other contagious disorders, will be more clearly understood.

"Some novel, and probably important matter will be found in the chapter which treats of syphilis; and those chapters that relate to the diseases which have hitherto been confounded with syphilis, are altogether the fruits of the author's observations under the plan already explained."

The first chapter is chiefly occupied in detailing the opinions of authors, and the histories of diseases which resemble the syphilitic disease, such as the yaws, sivvens, the Canadian disease of Swediaur, and those anomalous complaints which are said to be produced by the transplantation of teeth; but, as these have often undergone discussion, we shall hasten over them to the more important matter of his work, observing, before we quit this chapter, that in our opinion the author does not, perhaps, quite do justice to the discrimination of the profession in the following remark, for we believe that it is far from being the general practice to treat every sore on the genitals as venereal under whatever shape it may appear.

"Having, as I conceive, adduced sufficient evidence to prove, that ulcers on the generative organs, were at all times common before there was, in this part of the world, any acquaintance with syphilis; and that these ulcers were frequently followed by constitutional disorders; we must acknowledge the necessity of discriminating them from those of true syphilis, and from each other, and not condemn all, however unlike, to a similar mode of treatment, because they happen to be found on the same parts, and are produced by the same kind of communication. We might, with as much consistency, treat all ulcers of the throat alike, whether arising from scrofula, scarlatina, or simple inflammation; yet, strange to tell, at this improved period of surgery, and notwithstanding the valuable observations of Mr. Hunter, Mr. Abernethy, and Dr. Adams, it is very generally the practice to treat every ulcer on the genitals as syphilitic, whatever may be its appearance, character, or distinction."

The characters of the true chancre, as described by Mr. Hunter, and some peculiarities of the appearance as it affects the skin, are well described in the succeeding chapter, as well as the modes of treatment under different circumstances. If the phenomena of chancre are different when affecting the skin from what they are when the glans penis is the seat of the complaint, perhaps the character of the disease arises rather from the peculiarity of the structure affected, than of the affection; and the definition of Mr. Hunter, if this be the case, must fall to the ground, or can only apply to chancre on the glans. This is perhaps worth considering, but we proceed. The treatment which the author recommends in the inflamed phymosis is judicious, and his own. Repeated general

general bleeding, and other antiphlogistic means, are used at the same time with mercury. The case which we subjoin may serve to illustrate it.

"Patrick Dunn was admitted into the hospital on the 23d of December, 1811; he was affected with phymosis and profuse discharge; the entire penis was violently inflamed and swelled, a chancre, situated on the external surface of the prepuce, disclosed the nature of the ulcers which were concealed. He complained of severe pain, pulse 120, tongue white and furred, and excessive thirst.

"Twenty ounces of blood were immediately taken from his arm. He was directed to confine himself to bed, to support the penis in the most easy and convenient manner, to make use of emollient fomentations and poultices, and to inject warm water frequently between the prepuce and glans.

"He was also ordered to take a grain of calomel, and to rub in a dram of strong mercurial ointment, night and morning.

"The day following the pain was lessened, but the inflammation and sympathetic fever remained unabated. Sixteen ounces of blood were taken from his arm, and he was desired to persevere in the other means recommended.

"On the third day, the pain, inflammation, and swelling, were considerably diminished. On the fifth day, his mouth was affected, and the chancre on the external prepuce had assumed a healthy appearance. The swelling of the penis was rapidly reducing. He was directed to discontinue the pills, but to persevere in the ointment.

"A strong mercurial action was preserved in the system till the 24th of February, and he was shortly afterwards discharged well."

Some very useful remarks on the distinctions and treatment of bubo-warts, (in which he recommends the acetic acid,) and the venereal eruption, in short, the history of *syphilis*, occupies the rest of the chapter, which we shall pass over, after remarking that the whole of this part of the work displays considerable and judicious observation.

The principal end and subject of the work is pursued in the ensuing chapter; and the author divides the primary diseases, which he calls venereal, and distinguishes from syphilis, into two classes, comprehending six species, as follows:

"In the first class I would include, 1. A superficial ulcer without induration, but with elevated edges. 2. A similar ulcer, destitute not only of induration, but of elevated edges. 3. An excoriation of the glans penis, and internal surface of the prepuce, attended with purulent discharge. 4. Gonorrhœa virulenta. I have not been able to trace any constitutional symptoms arising from the first species. The constitutional symptoms of the other three species are precisely alike, and cannot, in the slightest degree, be distinguished from each other.

"In the second class may be comprised the two remaining species of pseudo-syphilitic disorders, viz. 1. The phagedenic ulcer; and, 2. The

2. The sloughing ulcer. There is a strong resemblance between these two primary diseases, as the sloughing ulcers, when the sloughs separate, can scarcely be distinguished from the phagedenic. Whether their constitutional symptoms are alike, is more than I am willing to decide, not having witnessed more than one case of the constitutional symptoms of the sloughing ulcer; but I should not omit to mention, that the appearances were favourable to the presumption of their similarity. But I have had an opportunity of observing numerous instances of the constitutional symptoms of the phagedenic ulcer, and they are materially distinct from those which arise from the primary affections comprised in the first class."

For a detail of the cases from which the author draws his conclusions and describes his treatment, we must refer the reader to the work itself. We should have been glad that the cases had been pursued to a greater length of time, and more particularly as the author does not hesitate to use *mercurial* topics in the cure of them; and perhaps his conclusion, that, had the cases been followed by any secondary symptoms, the patients would have returned to the hospital, may not be altogether assented to; if even the contrary inference be not drawn, from the irregular habits and prejudices of that class of patients, the inquiry is very important however, and conducted by the author in a very candid and able manner.

The remaining part of the book is occupied on the constitutional symptoms which present themselves in diseases which resemble syphilis, which, as we have said quite enough to excite the attention of the reader to the perusal of a very useful book, we shall defer till we have an opportunity of consulting the plates, in the next part, without which this subject is incomplete, and cannot be fairly discussed.

Experiments on the Production of Animal Heat by Respiration. An Inaugural Dissertation, read and defended at the Public Examination, before the Rev. President and the Medical Professors of Harvard University. New England Journal. By ENOCH HALE, Jun. M.D.

THIS is an interesting dissertation, and may be considered as adding some important facts to our present stock of physiological knowledge. The production of animal heat has been a subject of much interest and speculation. Like all other natural phenomena, it is susceptible of more illustration from simple facts and appropriate experiments, than it can receive from the most ingenious and complicated theories. It will be recollected that the experiments of Mr. Brodie, formerly detailed in this Journal, favour the conclusion that no heat is produced by respiration in the lungs. Dr. Hale, in the course of his inquiries, was surprised to meet with results totally different in this respect from those of Mr. Brodie. Instead of finding that an animal in which artificial respiration was kept up, cooled

faster than one which did not respire, and the lungs faster than the rest of the body; he found that the respiring animal retained its heat the longest, and that the lungs were the hottest part of the animal. We shall insert at length a part of the author's experiments, with his remarks and inferences on the whole.

Experiment 1.—For my first experiment I chose two young dogs of the same age and size. A thermometer in the room at the beginning stood at 66° of Fahrenheit.

I divided the spinal marrow of the dogs between the occiput and atlas, leaving a sufficient interval of time between killing the two, to enable me to observe and note down every appearance in each, that might occur. Immediately after this was done, a small opening was made in the abdomen of each animal, and the bulb of a thermometer inserted, and retained till the mercury became perfectly stationary; when it was withdrawn, and the opening covered with adhesive plaister till another observation was made.

The first animal lay perfectly still without any struggle, from the moment of the division of the spinal marrow. The heat at successive times was as follows:

At the commencement the mercury stood at 96°.

Fifteen minutes after it rose only to 93½°.

In half an hour it was at 92½°.

In forty-five minutes at 91°.

In an hour and five minutes at 89°.

And in an hour and twenty minutes at 88°.

The thorax of this animal was not opened.

Immediately after pithing the second animal, I commenced artificial respiration by means of a common bellows, provided with a double tube, (which was inserted into the trachea,) so contrived as to expire the air that had been breathed, without its passing into the bellows. In the course of the experiment, some of the expired air was passed through lime-water, which it rendered turbid.

As soon as the respiration was begun, the animal had pretty violent contractions of the voluntary muscles, which frequently returned till near the end of the experiment.

At the commencement, the thermometer in the abdomen stood at 96°. The heart was felt through the ribs beating from one hundred and thirty to one hundred and forty times in a minute.

Fifteen minutes after, the pulsations of the heart continued vigorous, and as frequent as at first. The thermometer stood at 94°.

In half an hour, the pulsations continued the same. The thermometer was at 93°.

In forty-five minutes, no change in the pulsations. The thermometer was at 92°.

In an hour and five minutes, the pulsations were about as frequent, and nearly as strong, as at first. The thermometer stood at 91°.

In an hour and twenty minutes, the pulsations had grown so feeble as to be but indistinctly felt through the ribs. The heat in the abdomen was 90½°.

I now

I now opened the thorax, and immediately placed the thermometer in contact with the lungs, where it stood at 91½°. I then laid open the pericardium, and put the bulb of the thermometer in contact with the heart, where it fell to 90½°. This surprised me, and lest it might possibly be occasioned by the presence of external air after the thorax was opened, I carried the thermometer a second time to the lungs, when it evidently rose a full degree.

Blood oozed out from the small vessels as I cut into the fleshy part, nearly as much as in a living animal.

The left side of the heart and the pulmonary veins were filled with florid blood, and the right side and venæ cavæ with dark-coloured blood. The heart continued to contract for some time after the thorax was opened.

Finding it extremely difficult to carry on a perfect respiration without a better apparatus, I procured a double bellows, so constructed that while one part filled with fresh air from the atmosphere, the other filled by exhausting the lungs of that which had just been thrown into them. As the bellows closed, the fresh air was thrown into the lungs, and the respired air into the atmosphere. With this bellows the subsequent experiments were performed.

Experiment 4.—The temperature of the room was 71°. Two small animals of the same age and size, whose pulsations were one hundred and twenty in a minute, were killed by dividing the spinal marrow; and their temperature observed every fifteen minutes, by inserting a thermometer into an opening in the abdomen. Effectual care was taken that the thermometer should be affected by nothing but the temperature of the animal. Between the observations, the opening was kept closed with adhesive plaister.

The pipe of the bellows was inserted into the trachea of the first animal, and respiration commenced immediately after it was pithed. At this time the thermometer in the abdomen stood at 98°. The inspirations were repeated forty times in a minute, and with such force as to imitate natural respiration as much as possible.

Soon after I dissected into the neck, and divided the nerves going from the head into the thorax, without injuring the large blood-vessels.

There were several violent contractions of the voluntary muscles, during the whole course of the experiment; but they were less frequent in this than in some preceding ones.

Fifteen minutes after pithing the animal, the thermometer stood at 96½°. The heart beat as strong as at first, one hundred and twenty times in a minute.

In half an hour the thermometer was at 94¼°. The pulsations of the heart were still the same.

In forty-five minutes the thermometer was 92°. The pulsations were one hundred in a minute, and rather more feeble than at first.

In an hour the thermometer was at 90°. The action of the heart was diminished to eighty-four pulsations in a minute, not quite so strong as before, though still very distinctly felt through the ribs.

I now began to open the thorax; but the pipe of the bellows, just at this time, slipping out of the trachea, engaged my attention, so that I did not get the thermometer fairly to the lungs till eight minutes after. It then stood at 89°. The temperature of the heart was about the same.

Blood flowed from the small vessels, as I cut into the fleshy parts. The heart continued to contract for some time after the thorax was opened, and irregularly after the respiration was stopped.

The other animal gave no visible signs of life, except for the first moments after it was pithed. The thermometer in the abdomen at first stood at 98°. In fifteen minutes it fell to 96°. In half an hour to 92½°. In forty-five minutes to 88°. And in an hour to 85½°.

An hour and eight minutes after the animal was killed, the heat of the lungs was 88½°.

Experiment 5.—The temperature of the room, the first part of the time, was steadily 68°. Two small animals, of the same age and size, were killed, as before, by dividing the spinal marrow; and the process of cooling observed every fifteen minutes, by an opening in the abdomen.

In the first animal, respiration was commenced as soon as possible after it was killed. The respiration was compared with that of the living animal, and made to imitate it pretty exactly.

No blood was lost in pithing the animal. It had entirely ceased struggling before the pipe of the bellows was fixed in the trachea; but upon the first inspiration the muscles acted violently. While this was doing, an assistant placed the thermometer in the abdomen, and found the heat 102½.*

The circulation went on as perfectly as could be wished. Not the slightest failure of the action of the heart could be perceived, either in force or frequency, for the first hour and a half.

During the first half or three quarters of an hour, the contractions of the abdominal muscles were so violent, as frequently to force out the intestines at the opening made for the thermometer, notwithstanding the attempts to keep it closed with adhesive plaister. Finding these attempts unavailing, I at length entirely closed the opening with ligatures, and made another very small one, which was also closed in the same way, except during the observations. This made the animal cool much faster at first than afterwards.

In fifteen minutes, the thermometer stood at 100°.

In half an hour, it was at 97°.

In forty-five minutes, at 95½°.

In an hour, at 95°.

Five minutes after this, there was a copious evacuation of urine. There had been none, as is common, when the animal was killed, though there was an evacuation of faeces.

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* The thermometer used in this experiment stood one degree higher than that used in the preceding. The difference was constant, in all variations of temperature.

An

An hour and fifteen minutes from the beginning, the thermometer stood at 94½°.

In an hour and a half, it was 94°.

In an hour and forty-five minutes, it was at 93¼°. The pulsation of the heart was now, for the first time, observed to be a little more feeble.

In two hours, the pulsation was much as at the last observation. The thermometer stood at 92°. I now opened the thorax, and applied the thermometer to the lungs and to the heart. The temperature of both was 92°.

The blood flowed freely from the small vessels, as I cut them. The arterial system was filled with florid, and the venous with black blood. The heart continued its action some time after the respiration was stopped.

The other animal was not killed till the afternoon of the same day. The thermometer in the room had then risen to 71°, and towards the conclusion to 73°.

The spinal marrow was divided, and the animal suffered to lie, as in the preceding experiments.* It exhibited no signs of life. The thermometer in the abdomen stood at 102½°.

In fifteen minutes, it was at 100½°.

In half an hour, at 98¾°.

Thirty-five minutes after killing the animal, I introduced the pipe of the bellows into the trachea, and began respiration. This was continued to the end of the experiment, with the same frequency and force as had been used in the respiration of the other animal. No visible symptom of life was revived by it.

In forty-five minutes, the thermometer was at 96°.

In an hour, at 94½°.

In an hour and fifteen minutes, at 92°.

In an hour and a half, at 90°.

In an hour and forty-five minutes, at 89°.

And in two hours, at 86°.

I now opened the thorax. The heat of the lungs was 81°. The lungs were very full of blood, which, of course, was florid. Both sides of the heart were filled with black blood. I could discern no appearance of there having been any circulation.

From the foregoing experiment, I think it clearly appears, that sensible heat is, either directly or indirectly, produced by the respiration of animals, after the communication is cut off between the brain and the rest of the body. This heat is nearly in proportion to the effectiveness of the respiration in carrying on the circulation, and in producing the changes proper to the living state.

In the first experiment, notwithstanding the constant influx into the lungs of air more than 20° colder than the animal, the respiring animal, at the end of an hour and twenty minutes, was two degrees

* It was my intention to have carried on respiration in this animal with carbonic acid gas; but my local situation rendered it impossible to acquire even the simple means necessary to obtain the gas.

and a half warmer than the other; and the lungs were one degree warmer than any other part of the body. This last circumstance was probably occasioned by the effects of respiration being still produced in the lungs, after the vital powers were too much reduced to eliminate the heat in the different parts of the body.

The second experiment, taken by itself, proves but little; the respiring animal cooling faster than the other. But when viewed in connexion with the third, its importance is very considerable. For although the respiration was so imperfect that the action of the heart, produced by it, never exceeded seventy-six pulsations in a minute, and much of the time was hardly perceptible through the ribs, yet it was sufficient to keep the temperature of the lungs equal to that of the rest of the body, for the space of an hour and twenty minutes, when breathing an atmosphere almost fifty degrees colder than the animal; whereas, in the third experiment, with the lungs inflated in the same manner, in the same temperature of the atmosphere, the lungs cooled nine degrees more than the abdomen, in only twenty-five minutes, although here there was also an action for a short time capable of producing heat, as appears by the slow cooling of the animal at first.

The fourth experiment gives a result still more decisive. The respiration being more perfect, we find, at the end of an hour, the respiring animal four and a half degrees warmer than the other. In this and the second experiment, the lungs of the non-respiring animals were considerably warmer than the rest of the body. This is precisely what we should expect, when we consider that air *confined*, (which is the state of the air in the cells of the lungs,) is one of the slowest conductors of caloric known.

The fifth experiment shows the effect of inflating the lungs, without the changes answerable to those of the living state. I have only to regret the accidental protrusion of the abdominal viscera, which cooled the respiring animal so much at first. But, notwithstanding this accident, the temperature of the lungs and abdomen of this animal, at the end of two hours, had fallen only to 92°; while in a warmer atmosphere, the abdomen of the other animal, in the same time, fell 6°, and the lungs 11°, lower, being only 8° above the surrounding air.

It is a matter of regret to me, that Mr. Brodie's results are totally different from those I have obtained. One cause may perhaps be, the loss of substance occasioned by separating the head of the respiring animals. As this was not necessary to a complete destruction of the nervous connexion of the brain with the body, I did not do it. In one or two instances, I divided the nerves of the neck; in others, I only divided the spinal marrow.

The separation of the head, however, is not sufficient to account for all the difference between Mr. Brodie's experiments and mine; and, I confess, I know not how to reconcile them. I will only observe, therefore, that my experiments were begun under a strong persuasion that the contrary from what now appears was true. They have all been performed in the presence of respectable gentlemen,

tlemen, who were uninfluenced by any opinion I might afterwards adopt, and who were witnesses to the faithful record of every leading fact that occurred.

The correctness of Dr. Hale's experiments and inferences will derive no small support from the following recent statement.

Mr. Brodie, Member of the Royal Society of London, has attempted to ascertain the state of the temperature and secretions in animals that are kept alive (by inflating the lungs) after being decapitated. I have, says M. Le Gallois, repeated the experiments of this author so far as relates to the temperature. It has not appeared to me that the results which he announces are so uniform as he states. Mr. Brodie assures us, that decapitated animals, which are kept alive, cool as fast as if they were dead. It is true that they cool considerably; but I have always found that young cats cool less than after death. The difference in my experiments has been from 1 to 3 centigrade degrees. In rabbits it is generally somewhat less.

Observations on those Diseases of Females which are attended by Discharges; by CHARLES MANSFIELD CLARKE, Member of the Royal College of Surgeons, &c. Longman and Co. 8vo. pp. 304.

(Continued from p. 162.)

THE vaginal discharge Leucorrhœa, more familiarly known by the terms whites, or weakness, is considered in the second chapter; the latter term is properly reprobated, as leading to an improper mode of treatment.

"It is very important to inquire into the cause of these discharges; by the knowledge of which, the judgment of the practitioner will be directed to the best mode of treatment.

"If the discharge is the effect of weakness, and if by its continuance the original weakness is increased, tonics will be required. If it depends upon some tumour in the vagina, the removal or support of this will also remove the discharge. If it arises from inflammatory action, this must be removed before any endeavour to restrain it is employed; for, as the discharge during its continuance lessens the violence of the disease which produced it, it should not be checked till such inflammatory action is diminished. Nothing can be more injurious under such circumstances, than the exhibition of tonics and stimulants, as cantharides, turpentine, and steel.

"In many cases it is injurious to restrain the discharge from the parts, as it would be to put an end to the natural salivation of a teething child whilst the determination of blood to the head continues, or to heal an ulcerating surface in a constitution which has been long accustomed to it, without substituting some other secretion for it."

"There are mixed cases, where the discharges vary from their usual appearance; moreover, a discharge of one kind will mark one stage of a disease, and a discharge of another kind a different stage.

As

As happens in diseases in other parts of the body, one disease also is sometimes blended with another, and the discrimination of these modifications and irregularities constitutes no small part of the skill of the practitioner. A schirrhous tumour of the uterus may have been attended (for years perhaps) by an increased secretion of simple mucus; but upon this disease becoming active, by inflammation attacking the tumour, so as to convert it into cancer, the discharge becomes purulent and highly irritating. The period of this conversion is indicated by the alteration in the nature of the secretion.

"In the cauliflower excrescence of the os uteri,* the discharge consists of little more than a clear watery fluid: blood, however, is sometimes mixed with it, or perhaps comes away alone in large quantities. Nevertheless, the discharge of blood forms no part of the peculiar character of this disease, but it is generally produced by violence or improper exertion.

"The discharges from the vagina may be comprised under the following heads:—1. Transparent mucous discharge.—2. White mucous discharge.—3. Watery discharge.—4. Purulent discharge.—5. Sanguineous discharge."

"Of some diseases of the uterine system, the white mucous, and the watery discharge, are pathognomonic symptoms; but the sanguineous belongs to none exclusively, being met with occasionally in most of them."

In the fourth chapter the doctrine of Sympathies is explained. Uteri affectus omnes fere ventriculo nocent.—Heberden Comment. de Historia Morbor. cap. 97.

"In cancer of the uterus, the stomach is always more or less affected with vomiting. When the uterus has been ruptured, vomiting comes on; and the matter rejected is of a black colour, resembling coffee-grounds."

A case is related which illustrates this subject. "A lady between fifty and sixty years of age, was attacked with pain in the back and at the bottom of the belly, attended by a purulent discharge from the vagina: there was nausea and vomiting, spasmodic pains were referred to the epigastric region, and there was pain over the anterior part of the head. An examination being made, the uterus was found extremely sensible to the touch, but it was not enlarged; at least no enlargement could be ascertained by examination: recourse was had to the hip bath and other remedies, and at the end of a few days the pain in the back and belly ceased, the sickness went off, and the patient was no longer troubled by head-ache. At various times since the first attack, this patient has been liable to the same symptoms, which have come on in the same order of succession; and they have yielded to the same means.

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* "See a paper by Dr. Clarke, in vol. iii. of the Transactions of a Society for the Promotion of Medical and Chirurgical Knowledge.

"Pain

"Pain in the lower extremities attends some uterine affections: previously to the appearance of the menses, and before the coming on of each period of menstruation, it is experienced by many women. It has been observed as a precursor of puerperal mania.—This pain in the legs is very different from cramp in the lower extremities, produced by pressure upon the sciatic nerve of one or both sides; and it takes place in cases where no such pressure is, or can be made.

"The diaphragm is apt to be affected in some diseases of the uterus, so that the patient becomes subject to hiccough.

"The mind also sympathizes with the uterus. This it does always when the stomach is affected by disease: but this is to be considered as one of the compound sympathies; for, both in men and women, when the digestive organs are disordered, the faculties of the mind are apt to be enervated; and occasionally to so great a degree, as to incapacitate the patient for attending to common business, or for enjoying the ordinary pleasures of life.

"But besides this affection of the mind, induced through the medium of the stomach, many cases are found where the connexion subsisting between the uterus and the brain appears to be more direct; as in furor uterinus, puerperal convulsions, and in those cases of madness which succeed parturition, when there is little of bodily disorder. The connexion between the uterus and the sensorium may account for the greater number of instances of madness which occur in females than in males; it appearing that the number of women, compared with that of men, affected by madness in this country, is in the proportion of five of the former to four of the latter."*

Among the diseases attended by mucous discharges from the vagina, are some which consist in the displacement of parts. Procidenti uteri, procidenti vesicæ, and inversion of the womb.

Chapters five, six, and seven, are devoted to the consideration of procidentia uteri, and its treatment: a disease, in its advanced state, productive of great distress to the patient, and often permanently incurable. The more important part of these chapters is the description of the symptoms characteristic of this complaint, which is particularly incumbent on the practitioner to make himself acquainted with in its *early stages*, as in its commencement, in a great majority of cases, it is susceptible of cure.

The author observes, "at the commencement of this ailment the woman complains of pain in the back, and this symptom sometimes continues for a great length of time without any other: pain is also felt in the groins, extending towards and terminating in the labia: there is a sense of fulness in the parts, and an increased discharge of transparent mucus from the vagina. As the disease proceeds, the pain in the back is described as the pain of dragging: the patient now has a sense of bearing down, or of weight; feeling, as she expresses it, as if every thing was dropping through her. The dis-

* See Haslam's Observations on Madness and Melancholy.

charge increases in quantity. The pain in the groins arises probably from the round ligaments being stretched, and that in the back perhaps from an elongation of the parts connecting the uterus behind. As soon as the erect posture is changed for the recumbent position, these symptoms go off.

"Strangury, although not a constant attendant, sometimes is present, and annoys the patient until the procidentia is cured. A lady, whose constitution was weak, and who had borne several children, was attacked by pain in the groins; she had a discharge of mucus from the vagina, and was affected by a frequent desire to make water, voiding very little at each attempt. She had employed poppy fomentations and opium, and had taken some oily purgatives, without experiencing the least good effect. Upon further inquiry it appeared, that the pain in the groins left the patient at bed-time, and that at the same time the frequent inclination to make water went off. This led to an examination of the parts, by which a procidentia uteri was discovered. The whole plan of treatment was now changed. She used an astringent injection, took some cinchona with sulphuric acid, and confined herself to the sofa. By pursuing these means, the strangury and all the other symptoms left her as her strength was restored, without the use of any mechanical means.

"The pain in the back which attends procidentia of the uterus, should be distinguished from that which is met with in cases of separation of the joint between the os ilium and the os sacrum, after some cases of labour. It has been remarked, that the pain in the back arising from procidentia is greatest when the patient is erect, and that it subsides in the horizontal posture. In the case of separation of the joints alluded to, the patient has a great difficulty in standing, or perhaps cannot stand at all, is uneasy even in the recumbent posture, and incapable of moving in bed without great pain."

These two complaints may exist together, as the author illustrates by a useful case. The separation of the bones, in this instance, was strikingly relieved by a leathern belt round the body.

"The symptoms arising from the sympathy between the stomach and the uterus are very distressing. The appetite becomes irregular, or is totally lost: the stomach and bowels lose their tone, and there is a great sense of distention in the belly arising from air, which may be heard when moving from one part to another; the spirits flag; every employment becomes irksome, and life itself is considered as scarcely desirable. The diaphragm is sometimes affected by spasm, and hiccough is produced."

When the vagina is long exposed to the action of the air, it is observed to go into ulceration. "This does not attack the whole of the exposed surface at once; but small spots or patches inflame and ulcerate, and these sometimes run into each other, but the whole surface is seldom covered by them. These ulcerations are generally not deep, and they have the appearance of healthy sores."

It should not be forgotten, that, when the uterus has descended so low as to be external to the vagina, its characteristic mark is the os uteri at the lower part of the tumour; and that, in all examinations,

tions, they should be made while the patient is erect. It will be obvious also, that the symptoms are much diminished when the woman is in a recumbent posture.

The mode of treatment recommended is that which is generally employed; support to the womb by pessaries, cold astringent injections, tonics, &c. which are varied according to the several indications. The best pessaries are those of box wood. Occasionally the oval one is found preferable "in those cases in which the tone of the vagina is so very much diminished as to make a large support necessary; because in this case the oval pessary rests by its two extremities upon the sides of the vagina; but lying with its long diameter applied to the short diameter of the lower aperture of the female pelvis, it neither interferes with the rectum nor with the urinary passage."

Where laceration of the perineum is present, the ordinary pessaries cannot be retained; it becomes then necessary to have recourse to the globular, which, if passed up the sacrosciatic ligaments, will sufficiently contract the lower aperture of the pelvis to enable it to be retained.

Procedentia vesicæ, or according to some procedentia vaginæ, is very rarely relieved; the former name is preferred, because it directs the mind of practitioners to an important part of the treatment. It will be obvious, that in this case the part is more uncomfortable in proportion to the quantity of urine in the bladder. A peculiar symptom which marks this complaint, is a pain referred to the navel, with sensation of tightness, which is also proportioned to distension of the bladder: this may probably be accounted for by the known attachment of the superior ligaments of the bladder to the navel. It is obvious this pain will not be relieved by internal remedies. In procidentia vesicæ the stomach is less frequently affected than in procidentia uteri; in the latter there is an opening in the lower part of the tumour, which is not the case in procidentia vesicæ. Encysted tumours may sometimes be mistaken for prolapsed bladder; but they are never diminished in size, like the latter, by the expulsion of its contents.

"Procidentia vesicæ admits of remedy by the use of a support introduced into the vagina; and the hollow pessary of a globular form before mentioned, is more serviceable than any other.

"Hollow pessaries made of the shape of an egg are worn by some women more comfortably than the globular pessaries; particularly in those cases where the diameter of the vagina is but little increased by relaxation; where the length of the pessary, from the perinæum to the falling portion of the bladder, must of course be sufficient to support the latter; and where, if the instrument were globular, unnecessary pressure and pain would be the consequence.

"The globular and the oviform instrument should be provided with four holes (in the latter, at the broad extremity), through which two pieces of silk can be passed, by means of which the instrument may be occasionally withdrawn by the woman or practitioner. Two holes would be sufficient for this purpose, if the

strength of the silk could be depended upon; but as it may happen to break by the force employed in withdrawing the instrument, the remaining sound piece affords the means of bringing it away. For want of this precaution, women who have worn the oval pessary have had some difficulty in removing it when the tape has been broken.

"Solutions of astringent substances should be thrown into the vagina often in the day. Particular care should be taken to avoid straining, as every exertion of this kind must affect the displaced part, and may force away the instrument. The woman should therefore avoid lifting heavy weights; and the bowels should be kept in such a relaxed state, that the fæces can be passed without any great exertion: the woman may therefore eat freely of fruit and vegetables; and, if any assistance is required from medicine, the mildest purgatives are to be preferred. As the urinary bladder, at different periods, contains very different quantities of urine, and as the degree of the procidentia will depend upon the degree of distention of the bladder, especial regard should be had to prevent the accumulation of urine, by desiring the woman to make water frequently."

Procidentia vaginæ is not attended with the constitutional symptoms of the procidentia vesicæ, nor the local inconveniences of procidentia uteri. The term implies a relaxation of the posterior part of the vagina.

The complaint may, among other obvious causes, be produced "by cysts belonging to diseased ovaries falling down into the hollow between the rectum and the posterior part of the vagina. In one case where this happened in labour, the author was consulted, under a supposition that the prolapsed part was the bag of membranes formed by the amnion and chorion, and attempts had been made to break them. The case was terminated by opening the child's head, by means of which operation the life of the woman was saved. After the labour the cyst went up again into the cavity of the abdomen, and the vagina being no longer pressed down, regained its natural situation.

"No effect in this disease is produced upon the shape of the os uteri, because the cervix of the uterus is hardly at all connected to the rectum, and the cellular membrane between the vagina and rectum is very loose, and readily admits of the vagina projecting."

The treatment consists in keeping the rectum empty, by mild aperients, and in supporting the prolapsed by a globe pessary. The use of astringent injections will also be found serviceable.

"*Inversio uteri.*—This complaint consists, as the name imports, in an inversion of the cavity of the uterus, so that the fundus comes through the os uteri.

"In the present improved state of the art of midwifery, this disease is very seldom met with, because it is generally a consequence of mismanagement of the placenta.

"Women who do not bear children are, for the most part, exempt from this complaint; but it is said that it may be produced

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by the weight of a polypus attached to the fundus of the uterus. This cause may of course render unmarried women the subjects of the disease; but it will be rarely met with: first, because polypus itself is unfrequent; secondly, because the polypus must be very large and heavy, that it may have the power of drawing down the uterus; thirdly, because an unimpregnated uterus is unyielding and firm; and fourthly, because the polypus, to produce the effect, must be attached exactly to the fundus of the uterus. In labours which have been badly conducted, the uterus is in a much more relaxed state that when the management has been judicious.

"The immediate consequences of an inverted uterus, when it takes place after delivery, are hemorrhage, faintness, and a sense of fulness in the vagina. The woman in this case compares the feeling with the sensations which she experienced just before the child was born. If the nature of the accident is discovered early, it will admit of a ready cure, by the return of the parts to their original state. This is to be effected by making pressure upon the LOWER PART only of the tumour, so as to cause this part to be received into that above it: a continuance of the same pressing force will in some cases quickly reduce the tumour. If the uterus has not been long displaced, and is much relaxed by loss of blood, the operation will be proportionably less difficult. The author has been called by other practitioners to cases of this kind, where the patient has expired, in consequence of hemorrhage, before the nature of the accident has been ascertained, when the uterus is inverted, and the placenta still adhere."

In the chapter on hemorrhoids, the author remarks, that ulceration frequently takes place on their surface, and that the sores often resemble in appearance those which arise from venereal infection. Similar sores are also observed upon the sides of the anus, to the distance of two inches or more; and they are likewise formed within the labia. Those on the outside of the anus resemble venereal sores; for the cellular membrane is absorbed more quickly than the skin, which gives an appearance of high edges to them. They also become very difficult to heal: but these ulcerations differ from venereal sores, in not having their surfaces covered with that thick yellow film which is met with in chancres; and although the sores do sometimes run into each other, yet they do not spread with the same rapidity as chancres. Besides, chancres will heal by the use of mercury: this will rather be injurious in the other ulcer, which will heal by the application of simple stimulants, such as solutions of sulphate of copper, or of nitrate of silver.

"A discharge of mucus from the vagina is a concomitant symptom of the piles; for the internal iliac artery supplies both the hemorrhoidal vessels and those about the vagina with blood; and it will be found difficult to restrain this discharge whilst the hemorrhoidal tumours continue.

"When a tumour in the cavity of the pelvis occasions the disease, the symptoms will continue till the tumour rises into the cavity of the abdomen. If that tumour should be a pregnant uterus, quickening

ing will cure or relieve the patient, when the piles occur in the early part of pregnancy; and labour, when they appear in the more advanced stages. But, if the pressure should be caused by any morbid tumour, as the progress of it is very uncertain, as it sometimes proceeds very rapidly and sometimes very slowly, it will be difficult to foretel how long the pressure will continue."

Ascarides are said to be another cause of mucous discharge from the vagina, attended with extreme and insufferable itching.

"*Carcinoma Recti.*—The whole circumference of the gut is most commonly affected; and, the parts becoming thickened in consequence of the disease, the capacity of the canal is diminished, and the passage of the fæces through it is impeded. The resistance produced by this cause makes the discharge of the fæces very painful; and as piles are a very common disease, and are generally supposed by patients to be the cause of any pain or difficulty in voiding the fæces, this complaint has been mistaken for them, and the patient has suffered the inconvenience without being aware of any danger.*

"In consequence of this narrowness and obstruction in the rectum, the colon becomes gradually more and more distended; and, upon an inspection of the body after death, it has been found to contain several pints of fluid, resembling a mixture of fæces and water.

"This disease has also been mistaken for stricture of the rectum; and the patient has been much injured by the mode of treatment pursued in that disease, and her death has been accelerated. Bougies introduced into the constricted part have produced a great degree of inflammation in the neighbourhood; and thus, by adding to the thickening of the gut, increased the symptoms which they were intended to alleviate.

"The pain attending the complaint is of the darting or lancinating kind; and, being referred to the neighbourhood of the uterus, has led to a supposition that the uterus was the diseased part. This error, with regard to the seat of the complaint, if its true nature is understood, is not very important; because, whether the complaint is in one viscus or the other, the principles upon which it is to be treated are the same.

"In carcinoma of the rectum the pain will be greatly increased by the passage of the fæces, and the pain will be such as the patient would feel upon the rough handling of any external tumour of a similar character; whereas in the common stricture of the rectum, although there may be pain, it will be by no means so acute, being

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* In speaking of the treatment of piles, the author seems to have forgotten a most invaluable remedy, commonly known by the name of Ward's Paste. We are in the habit of preparing this medicine, in the form of powder, thus:

℞. Enulæ Camp. ℥ij.
Sem. Fœnicul, ℥ iij.
Piperis Nigri, ℥ j.

A tea-spoonful should be taken three times a-day in honey.

occasioned

occasioned merely by the resistance offered to the passage of the contents of the gut.

"In carcinoma of the rectum, acute pain is occasionally felt when no endeavour is made to expel. In stricture of the rectum, the pain is felt only at this time, or for a short time afterwards.

"The constitution also is more likely to be affected in carcinoma than in stricture of the rectum; and the sympathies between the part diseased and other parts will be more likely to be excited in carcinoma than in stricture.

"The hemorrhoidal veins are apt to become enlarged, and sometimes to bleed. The bleeding may have some effect in retarding the progress of the complaint. Small œdematous tumours about the anus are also very liable to be formed; but both of these symptoms are likely to be met with in other diseases.

"When the uses of the rectum are considered, and its liability to be stimulated, it will appear probable that carcinoma of the rectum will advance with greater rapidity to the more active stages of the disease, than when it attacks parts less exposed to pressure or disturbance; but upon this subject it will be difficult to form any precise opinion, because it is impossible to know how long the disease may have existed before the practitioner was consulted; and it frequently happens that he is not consulted at all until the inflammatory action has commenced, which attends the conversion of the complaint into the ulcerated state. Moreover, the disease not being frequent, opportunities of collecting information respecting it will not often occur.

"That the mesenteric glands are affected in the latter stages, may be learned from writers on morbid anatomy. Dr. Baillie states, that when a portion of the intestinal canal becomes cancerous, some of the absorbent glands in the mesentery also become affected with the same disease, in consequence of the matter of cancer being conveyed to them by the absorbent vessels. This explains the great emaciation which commonly attends the disease. The mere irritation and pain, and the quantity of the mucous discharge from the vagina, during the first stage of this disease, may in some measure account for it; but if the parts concerned in the conveyance of the chyle into the blood have their structure likewise altered, it is reasonable to expect that the emaciation and loss of strength will be more quickly produced.

"When the disease becomes cancerous, the symptoms begin to be more formidable, the mucous discharge is converted into one of a purulent kind; but the history and treatment of this stage will be considered under the head of Purulent Discharges. It may here, however, be remarked, that occasionally in the ulcerated stage a communication is made between the rectum and the vagina, in consequence of the destruction of the parts which naturally separate these cavities from each other; that the pain becomes more acute; that the stomach is apt to be affected with vomiting; and that hectic fever sometimes supervenes."

(To be continued.)

MEDICAL

MEDICAL AND PHILOSOPHICAL INTELLIGENCE.

ROYAL SOCIETY.—On Thursday, the 30th of June, a paper by Sir EVERARD HOME, bart. was read, on the Influence of the Nerves on the beating of the Arteries. He was led to his opinion of this influence, by the case of an officer who had received a ball in the leg. The ball was lodged among the fractured parts of the tibia; and after its extraction, an attempt was made to remove some parts by the application of caustic alkali; but the pain produced was so great that they were obliged to desist. The pain was not in the part to which the alkali was applied, but at some distance, and seemed to result from the violent beating of the arteries. Hence it was ascribed to the action of the alkali on a nerve, and the consequent reaction of this nerve upon the arteries. Upon laying bare the carotid artery of a rabbit, and applying caustic alkali to the intercostal nerve, the artery began to beat violently, and continued to do so for some time. This fact, in the author's opinion, throws considerable light on the action of the arteries in various parts of the animal economy, hitherto but imperfectly explained.

M. BERTRAND has recently made some experiments, which lead us to hope that charcoal will be found a useful antidote in cases of mineral poison taken into the stomach.

Super-oxymuriate of Mercury.—Exp. 1. On 2d of February, 1811, at ten o'clock in the forenoon, I caused a dog, six months old, to swallow, on an empty stomach, six grains of corrosive sublimate and eight grains of charcoal mixed together, and enclosed in a portion of the intestine of a fowl, tied at its two extremities. The animal suffered no inconvenience from it. He ate his food with good appetite in the evening, as well as on the following days.

Exp. 2. On the 24th of the same month, at ten minutes past ten o'clock in the morning, the same dog swallowed six grains of super-oxymuriate of mercury, mixed with some butter. In a quarter of an hour he fell into violent struggles, and soon after vomited some glairy fluid mixed with blood. He appeared to be in great pain, and hung down his head, sometimes lying on the ground; his jaws were closed by tetanic spasm. At twenty minutes past one, I caused him to swallow some water with charcoal, insinuating it at the corners of his mouth. The efforts at vomiting became less violent and less frequent. At forty minutes past one I gave him another dose of the charcoal powder, which this time was rendered thicker, as the animal could swallow better, the jaws not being so firmly closed, and the vomiting had entirely ceased. At half past two the dog still appeared dull, but tranquil; he refused food, and prevented other dogs from approaching it by the most furious attacks. At five o'clock he appeared to suffer some tenesmus, and began to take a little food. The next day all the functions were performed in a healthy manner.

Exp. 3. On the 6th of February, 1813, at eight o'clock in the

morning, I swallowed, fasting, four grains of corrosive sublimate in a cup of strong mixture of charcoal powder, sweetened, and rendered aromatic by orange-flower water. In twenty minutes I perceived an oppressive pain in the præcordial region, with some heat in the stomach. I felt a slight sensation of thirst during an hour, but took nothing to allay it; at ten o'clock, not feeling the least degree of pain, I breakfasted with an appetite, and experienced no further inconvenience.

Arsenious Acid.—Exp. 1. On the 2d of February, 1811, at five minutes before ten o'clock in the forenoon, I gave to a dog, seven months old, on an empty stomach, six grains of powdered arsenic, mixed with eight grains of charcoal, enclosed in a piece of the intestine of a fowl. He appeared to suffer no inconvenience from swallowing it; he continued perfectly well, and enjoyed his usual appetite; three days afterwards he voided the portion of intestine completely empty.

Exp. 2. On the 24th of February, 1811, at noon, I caused a dog, nine months old, to swallow, on an empty stomach, six grains of arsenic mixed with butter. In half an hour he vomited, with violent efforts, mucus slightly tinged with blood. Some charcoal mixture was given to him at a quarter before one, and all the symptoms were speedily alleviated. At two o'clock he swallowed another dose of the decoction; at half past two all the functions seemed perfectly recovered, and he had a good appetite; at five o'clock he ate heartily, and with voraciousness.

Exp. 3. At half past seven o'clock in the morning of the 16th of February, 1813, I swallowed fasting five grains of arsenic powder in half a glass-full of a strong mixture of charcoal. At a quarter before eight o'clock, I perceived a painful sensation of heat in the epigastric region, with great thirst, but without any other symptom of consequence. I now drank another half glass of the mixture. At half past nine the oppressive pain in the epigastrium had disappeared, but seemed to have changed its situation, as I felt a similar sensation in the rest of the alimentary canal. Being very thirsty, I drank several cups of infusion of orange flowers; and at a quarter past ten I was completely well. At noon I dined as usual, without inconvenience, and could perceive no farther derangement in any of the digestive functions.

Substance extracted from the Vagina of an old Woman.—Dr. THOMSON has received from a surgical friend a specimen of a substance which had been extracted from the vagina of an old woman. It is of a yellowish white colour, smooth upon the outer surface, has the hardness of bone, and easily breaks. When heated it gives out the smell of burning feathers, and becomes black; but if it be kept for some time red-hot, it becomes quite white, and has the aspect of burnt bone. It dissolves slowly, and without effervescence in muriatic acid, from which it may be again precipitated by caustic ammonia. These properties leave no doubt that it consists of phosphate of lime, cemented together by an animal substance which is

probably of the nature of mucus. When a portion of this matter is kept for some days in a weak acid, almost the whole dissolves, and the undissolved portion is in a state of white flocks.

Report of the State of Vaccination in Sweden.—On the 14th of January, 1814, Mr. Macmichael, an English gentleman, attended the Royal College of Health in Stockholm, and delivered to the college a copy of the Report of the National Vaccine Establishment in London, dated the 22d April, 1813, and presented to Lord Sidmouth, Secretary of State for the Home Department; at the same time he requested, that a short account of the progress of vaccination in Sweden, and of the measures which had been adopted for its promotion, might be communicated to him, for the information of the British Parliament.

The Royal College had particular satisfaction in receiving Mr. Macmichael, and undertook to comply with his request so much the more readily, as it had the pleasure of numbering among its honorary members the respectable name of Dr. Jenner for whom it was reserved to demonstrate, by the most decisive experiments, the protective power of the cow-pox against the most terrible and destructive contagion of the small-pox; a pestilence, which, by means of this blessed discovery, must certainly be ultimately extirpated from the face of the earth.

It was to be expected, from the excellent arrangements which the Kings of Sweden had adopted for somewhat more than half a century, in every department of medical science, that the incomparable discovery of Dr. Jenner, like the inoculation for the small-pox at a former period*, should not only become an object of the most accurate investigation, but also, when approved by experience, be generally introduced and promoted by rewards and established regulations.

The medical practitioners of Sweden, who had already been informed, from the time of Dr. Jenner's first discovery, by means of a constant correspondence with the learned in other countries, of the expectations which were entertained of the success of experiments made with the cow-pox, had great pleasure in learning that one of their colleagues, Dr. Gahn, a member of the Royal College, had, towards the end of 1799, procured some vaccine matter, and obtained the most satisfactory result from inoculating with it. Another Swedish physician, now Professor of Medicine, Dr. Rosensköld, printed in 1801 a small pamphlet, entitled, " to the Pub-

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* It is remarkable, that the celebrated Dr. David Schultzenheim, who was appointed as long ago as 1754, by the States of the kingdom, to inquire into Sutton's and Dimsdale's mode of inoculating the small-pox in England, is now the president of the Royal College of Health, and has been the most instrumental, by means of his powerful influence, in promoting the most salutary measures for the introduction of vaccination.

lie on the Cow Pox;" and performed vaccination with success in several parishes in Skaine. About the same time the undersigned also published a more detailed account, with coloured figures, under the title, "the Small Pox may be extirpated;" and this essay was distributed to all the churches in the kingdom.

The government, already attentive to the inestimable advantage which the inoculation of the cow-pox seemed to promise, directed the college to examine Dr. Jenner's discovery with the greatest accuracy, for which the proper means were immediately afforded; and the College was ordered, after collecting the results, to present its report to the King.

This report, which fully confirmed the excellence of the Jennerian discovery, occasioned the salutary law which was first enacted in 1803, by which vaccination was established throughout the kingdom; and the College was commanded to promote its adoption by all possible means. The king was pleased to appropriate 900 dollars, spec. banco, to be divided into premiums, which were to be distributed among such medical men as could exhibit the greatest number of vaccinated persons.

A particular regulation was made for the metropolis, imposing a fine of three dollars on any one who should fail to announce to the Medical Officer of the district, the appearance of the contagion of the small-pox; and in every such case, the persons infected was to be carried to the Small Pox Hospital, where every measure was adopted for his being properly nursed; and the same precautions have been continued to the present time.

It was long a question, whether new-born children could be vaccinated with success, and whether the matter taken from them might be employed with as much security as if taken from adults? This doubt has been altogether removed, and in the General Lying-in Hospital all the children are now vaccinated within nine days from the time of their birth; so that, by means of this progressive vaccination, fresh matter remains constantly in existence.

The want of a sufficient supply of vaccine matter for the extensive provinces of the kingdom, was long an obstacle to the universality of vaccination in Sweden. This obstacle no longer exists; since the Royal College of Health, in consequence of the humble representations which it made to the King, obtained, the adoption of a very effectual measure for this purpose, in the appointment of a particular establishment for the general regulation of vaccination throughout the kingdom, which took place in the year 1812.

This establishment consists of a director, and several inspectors of the stations for vaccination in the provinces. The director is a member of the Royal College of Health, whom the King has graciously commanded to receive and examine all reports, to answer all inquiries, to conduct the distribution of vaccine matter, which is delivered, free of postage, to all persons who apply for it; and lastly to report to the College every thing relating to vaccination that requires further regulation, and to propose to it as proper persons to receive rewards, all those who appear to be the most de-

serving. He has also the immediate inspection of all the medical men, who are appointed to conduct the business of the stations, established in almost every province; the progressive vaccination performed at these stations being calculated to maintain a constant supply of fresh matter, which is also distributed, free of postage, to those who require it; and their proceedings being registered in proper catalogues and journals.

In Stockholm, three several stations of this kind have been appointed, whence fresh matter may always be procured with certainty, if it happens to be wanting in any particular province.

The archbishop, bishops, and the whole of the clergy throughout the kingdom, having, from the time of the happy discovery of vaccination, embraced it with the utmost distinguished zeal; and many of this respectable body having not only employed the most effectual means for the removal of vulgar prejudices against it, but having even actually practised vaccination themselves; the King, assured of the continued exertions of the clergy in the same cause was pleased to direct, that every minister should superintend the progress of vaccination within his parish; and should be empowered to call to his assistance one or more inspectors of vaccination, according to circumstances, for the purpose of causing all children to be properly vaccinated within the first year after their birth, and keeping proper documents of the performance of the operation. In each parish or district there must be an accredited vaccinator, whose duty is to perform vaccination, and to give a report of his proceedings to the Royal College of Health.

The College has also published, by the King's command, a book of instructions for vaccinators and inspectors of vaccination, which has been distributed gratis to all the Churches in the kingdom. This treatise adapted to the use of the Public, affords an accurate knowledge of the true and false cow-pox; of the varieties which most frequently occur in it; and of the cutaneous diseases which occur so often in Sweden, very nearly resembling the small-pox.

For the more effectual encouragement of the practice of vaccination, the King has been graciously pleased to appoint rewards of two different kinds, pecuniary premiums and honorary medals. The latter are distributed, commonly in silver, but sometimes in gold, to those who have particularly distinguished themselves. In all cases those who have deserved rewards, are humbly pointed out to the King, by the College of Health; and his majesty has reserved to himself the right of assigning the proportions in which those rewards shall be distributed. It is also in the King's name, and with a certain degree of publicity, that these marks of his approbation are bestowed.

For the honour of the medical profession in Sweden, it must not be forgotten, that although inoculation for the small-pox was one of the most lucrative branches of their private practice, and has been entirely superseded by the simple process of vaccination, no one individual of the profession has raised any obstacles against the cow-

cow-pox; but every one has contributed to its advancement, by giving advice, information, and assistance, to the utmost of his ability. No single publication has appeared to call in question its high importance*, and its superiority to variolous inoculation; which has been entirely discontinued ever since the year 1802, rather by a tacit and universal consent, than in consequence of any royal prohibition.

It may therefore be asserted, that the small-pox, that equally disgusting and destructive pestilence, which for many ages continued annually to send out of the world an immense number of young children, is now through the influence of Dr. Jenner's inestimable discovery, so perfectly extirpated in Sweden, that it never can become epidemic, even if at any time notwithstanding all the orders and all the vigilence employed for its exclusion, the infection should make its appearance. Such in the last twelve years, has been the effect of the King's wise and humane attention, of the unanimity and disinterestedness of the medical profession, of the patriotic zeal of the clergy, of the good examples so promptly exhibited by the upper classes, and of the progress of information and civilisation in the lower.

The undersigned, who has drawn up this short account at the request of the Royal College of Health, has also the honour of sending with it, in the name of the College, a copy of the book of instructions, and an impression in silver of the honorary medal, which was struck by the King's command, under the direction of the College, and which is distributed in the King's name, for the promotion of vaccination.

FR. HEDIN, M. D. First Physician to the King, Medical Councellor, &c. &c.

Stockholm, 10th February, 1814.

On the Solubility of White Oxide of Arsenic in Water; by M. KLAPROTH.—The solubility of white oxide of arsenic in water is a property which essentially charactizes it. Though the fact has been long known, yet the degree of solubility has not been accurately determined. According to Bergman, eighty parts of water at the temperature of 60° dissolve one part of white oxide of arsenic, while the same quantity of oxide is dissolved by fifteen parts of boiling water; according to Navier, eighty parts of boiling water are requisite to dissolve one of the oxide; and according to Hagen,

* The answer which the undersigned returned the 1st Nov. 1801, to a letter addressed to him, by the Vaccine Committee of the Society of Medicine at Paris, and which is inserted in the second Report of that committee, cannot justly be considered as a publication of this kind. It was not quite three months after this time, that having acquired perfect confidence from inoculating a cow with the cow-pox, and transferring the operation to the human subject, he published the before-mentioned essay entitled, "the Small-Pox may be extirpated."

30 grains of white oxide of arsenic require four ounces of boiling water to dissolve them.

These different statements induced me to endeavour to ascertain the proportion; and the result of my experiments is, that three parts of white oxide of arsenic may be kept in solution by 100 parts of water at a medium temperature. On that account, the statement of Aschof, that one part of white arsenic requires 200 parts of boiling water to dissolve it, appeared to me extraordinary.

As this result may occasion mistakes in medical jurisprudence, I consider it as proper to point out the error of M. Aschof, and to show that the new experiments which I have repeated on this subject have confirmed my former opinion.

A.—To determine the solubility of the oxide in cold water, I introduced 20 grains of it, previously reduced to a fine powder, into a flask containing 10 ounces of water of the temperature of 60°. This mixture was left for 24 hours, being often agitated in the mean time. The undissolved portion, collected upon a filter, and well dried, was eight grains. Of consequence, 12 grains had been dissolved. The result of this experiment is, that 1000 parts of cold water dissolve only $2\frac{1}{2}$ parts of white oxide of arsenic.

B.—Water can only saturate itself with this oxide at the boiling temperature. To ascertain the degree of solubility, I boiled for a quarter of an hour 200 grains of white oxide of arsenic in powder in four ounces of water in a phial. As soon as the undissolved part was deposited, I decanted off the liquid portion, which weighed 1800 grains. This liquid, evaporated in a capsule, the weight of which had been determined beforehand, left for residue 140 grains of white oxide of arsenic. Therefore 1000 parts of boiling water take up $77\frac{1}{4}$ of white arsenic.

C.—It was particularly important to know how much white oxide of arsenic the boiling water would retain after it was cold. For this purpose 10 ounces of boiling water were saturated with white oxide of arsenic in powder. After cooling I left the phial for three days in cold water, during which time some white arsenic separated in the crystalline form. Five ounces of the decanted solution were evaporated in a capsule previously weighed. The residue, when well dried, weighed 72 grains, and was white oxyd of arsenic. Hence it follows that 1000 parts of water retain in solution, after cooling 30 parts of white oxyd of arsenic, or 100 parts of water retain three parts of the oxide. It is obvious that the cold of winter may produce some modification in these proportions.

D.—The crystalline form of the white oxide of arsenic obtained by evaporation may lead to the suspicion of the presence of water, or that the oxide is in a state of an hydrate, which might account for the argumentation of its weight. To determine this point, I boiled three ounces of water in a phial with 100 grains of arsenic. After a quarter of an hour's boiling, all the arsenic was dissolved. The clear solution, being evaporated to dryness, left 100 grains of white oxyd of arsenic in a crystalline form. This experiment shows that oxide of arsenic does not combine with water when dissolved in that liquid, and evaporated to dryness.—*Thompson's Annals of Philosophy.*

We select the following paragraph from the Morning Chronicle, dated August 2d, giving the account of the use of Clivers, or Goose-grass, as a remedy for *cancer*. We do not vouch for the truth of the statement, which it would be equally arrogant in us to deny; nor shall we question whether the disease cured was actual cancer, but simply remark, that if it were not so, admitting the fact, it may be received as an evidence at least that the medicine is serviceable in *some* ulcerations—*mali moris*. The cause of science would be much advanced if our expectations from new remedies were more moderate. The process was recommended by the minister of a parish in the country to a poor woman, who had been for many years afflicted with a bloody cancer, and who was then thought to be in so hopeless a state as to have but a short time to live. After giving her an aperient medicine, advising her to abstain from salt meats, and to live on the most simple diet, he advised her to take, twice a-day, a quarter of a pint of the juice of clivers, the plant having been well pounded and squeezed; he ordered that the juice should also be boiled, and mixed with hog's lard, for an ointment to the wound, laying the bruised clivers over it, and keeping them constantly applied and renewed. The amendment to be expected is so very gradual, that it requires steady perseverance in the use of both the internal and external means. In three months the poor woman was cured, and the wounds perfectly healed; and she now repeats the regimen every spring and fall, for prevention. The same benevolent clergyman recommended the process to a gentleman who had a troublesome eruption, somewhat like a leprosy; and he, in addition to the rest, mixed clivers with his salad. In a few months he was perfectly well. It was also given to a poor man in Herefordshire, who had a cancer in his face to a dreadful degree, and he was perfectly restored by it. It is also said to be frequently beneficial in consumptive cases, as well as in other scorbutic complaints. Encouraged by the account of the benefit derived from the use of this plant, a lady was induced, last January, to send the particulars here related to a person in Kent, who, she understood, was labouring under that sad disease, and suffering exquisite pain from it. She has persevered in the remedy, without intermission, for three months; and writes word now, that she hopes, by the Divine Blessing, to be entirely cured of a disorder which had afflicted her fourteen years. The tumours are healed, except one, which is reduced to the size of a pin's head: she feels no pain, and says that her health and spirits are excellent.

Report of the Diseases in Paris for June and July. By MM. MENURET, PORTAL, BAZIN, DUFFOUR, DE MONTEGRE.—The weather at Paris during the last fortnight in June, was extremely cold. The effects of the temperature were manifested by the continuance, the number, and the obstinacy of catarrhal and rheumatic affections; and the cold was more severely felt, and proved more injurious, from its suddenly occurring after very hot weather. Inflammatory complaints were not frequent; humoral, bilious

bilious fevers were more common. Stomach affections, and diarrhœas, which, from its scarcity, could not be attributed to the abuse of fruit, nor, from the cold state of the season, to the warmth of the weather, were very prevalent; they were more probably caused by checked perspiration, and readily yielded to ipecacuanha and tonics.

Several eruptive disorders were noticed; amongst these were cases of *scarlatina*, *rubeola*, and (with regret we mention it) *variola*, a melancholy proof of invincible obstinacy and prejudice.

Typhus fevers have diminished in number and intensity, but it still exists amongst some of the foreigners lately arrived at Paris; and there is reason to suppose that they had occupied the same lodgings if not beds that had been recently occupied by persons suffering under that species of fever.

The beginning of July the heat became suddenly augmented, Reaumur's thermometer rising to 18° and 20° in the middle of the day. For some days an universal calm prevailed. On the evening of the 7th instant a storm threatened, but passed away, and on the following day the heat was increased. This state of the atmosphere was almost insupportable; not a breath of air was perceptible whilst the sun was above the horizon. The immediate effects are characterized by numerous putrid fevers; almost all diseases have now a tendency to put on the type of these fevers. Cutaneous eruptions, and cases of obstinate ophthalmia, are also very prevalent and obstinate. The authors of the report condemn the use of purgatives in the treatment of these putrid fevers, as they term them, and seem very fearful of lowering their patient; but they do not recommend any particular plan, nor acquaint us with the success of any remedies that may have been employed. They quote Hippocrates against the use of purgatives in the commencement of diseases; and gravely remark themselves, "On ne doit pas oublier que presque j'amais il n'est avantageux qu'il y ait des évacuations alvines dans le commencement des maladies." The difference of practice, in this respect, between the two countries, is very striking.

The Bulletin of the *Societé Medicale d'Emulation* contains two authenticated cases of measles occurring twice in the same individual—one of a lady who was attended by M. GASLELIE in 1781, and again in 1813, which is said to have possessed all the characters of authenticity that could be desired. At the same time M. MONTAIGN, Physician of the Hotel Dieu, had a patient with the measles who before had gone through the disease.

Hooping Cough.—M. BERTRAND, having vaccinated twenty-one children labouring under the hooping cough, draws the following conclusions. 1. That the progress of vaccination, even in its most perfect state, produces little or no effect at the attack or during the first stage of hooping cough. 2. That the cough is alleviated by vaccination, when the disease has arrived at its second stage. 3. That, when the hooping cough is in its last stage, vaccination produces a remarkable and, as it were, a specific effect upon it. In the

the first stage it produced only a slight effect upon one out of nine children. In the second stage the disease was sensibly influenced in five out of seven children; and in the third stage, out of five children, one obtained an immediate cessation of the cough, and three were sensibly relieved during its further progress. On one it produced no effect; but the strength of this child was so reduced, that the vaccine pustule, although possessing its true character, went through its course but very imperfectly.

M. de MONTEGRE has made several observations relating to digestion, which have led to the following inferences:—1st, That the gastric juice, when it is not acid, putrefies like saliva. 2d, That it never exercises an antiseptic power on the food but when it is acid; and that saliva which has acquired an equal degree of acidity by means of acetic acid, produces the same effect. To discover whether acidity was a condition indispensible to digestion, M. Montegre gave a dose of magnesia before eating, which was suffered to saturate the whole of the acid contained in the stomach. The food, after a certain time, being vomited, it was found that digestion had begun, but there was no appearance of acidity. When it was vomited still later, it was much more digested and manifestly acid.

The author draws these conclusions from his observations:—The gastric juice does not appear to differ from saliva, and is merely a solvent proper to prevent the putrefaction of the aliment, and to promote their digestion, independant of the action of the stomach. The acidity which it possesses, as also that which the food receives, ought to be attributed to the action of the stomach.

Dr. HARRISON, Lecturer on Medicine at Windmill-street, has been elected one of the Physicians to the Northern Dispensary, in the place of Dr. WHITTELL, resigned.—Mr. ANDREW MATHIAS, of Bloomsbury-place, has been elected Consulting Surgeon to the same Institution, in the place of Mr. CHARLES BELL, resigned, and now one of the Surgeons to the Middlesex Hospital.

About a fortnight since died, at a very advanced age, Dr. BENAMOR, of Millman street, Bedford-row, whom we believe, of late years, to have been the only practiser of animal magnetism of this country.

Dr. TROTTER, of Newcastle, is preparing for the press a new work, entitled, Reflections on the Diseases of the Poor for the last ten Years; being a summary of those patient's cases who have received his gratuitous advice on the mornings of Tuesday and Saturday, in number upwards of 3000. Dr. Trotter has taken for his model the fine disquisitions of Dr. Reid, which were published in the Monthly Magazine a few years ago, and will comprehend many of the complaints incident to the laboring poor, in the mining, manufacturing, and other departments of the neighbourhood.

The Medical Lectures in the University of Glasgow will begin on Tuesday, Nov. 1st, at the following hours:—Institutions of Medicine, by Dr. FREER, at half-past eight in the morning. Surgery, by Dr. JEFFRAY, at ten. Midwifery, by Mr. TOWERS, at eleven. Practice of Medicine, by Dr. FREER, at twelve. Anatomy, by Dr. JEFFRAY, at two in the afternoon. Dietetics, Materia Medica, and Pharmacy, by Dr. MILLAR, at three. Chemistry and Chemical Pharmacy, by Dr. CLEGHORN, at seven.

The following gentlemen have obtained the degree of Doctor in Medicine, from this University, within the last twelve months:—Mr. B. Blake; Mr. Shirley Palmer; Mr. Charles Scudamore; Mr. Joseph Moore; from England. Mr. William Hunter; Mr. James Wright; Mr. William Cumin; from Scotland. Mr. Llewelyn Jones; from Wales. Mr. John Kennedy; Mr. James Turretin; Mr. James Kinneir; from Ireland.

Dr. BROWN will commence his Lectures on Botany about the beginning of May next.

Mr. WANT will deliver a Course of Lectures on the Theory and Practice of Midwifery, early in the month of October.

Dr. ADAMS will commence his autumnal Course of Lectures on the Institutes and Practice of Medicine, at his house, No. 17, Hatton Garden, on Tuesday the 4th of October, at ten o'clock in the morning precisely.

St. Thomas's and Guy's Hospitals.—The winter Course of Lectures at these contiguous Hospitals will commence in the first week of October: viz.

At St. Thomas's.—Anatomy, and the Operations of Surgery, by Mr. ASTLEY COOPER and Mr. HENRY CLINE. Principles and Practice of Surgery, by Mr. ASTLEY COOPER.

At Guy's Hospital.—Practice of Medicine, by Dr. BABINGTON and Dr. CURRY. Chemistry, by Dr. BABINGTON, Dr. MARCET, and Mr. ALLEN. Experimental Philosophy, by Mr. ALLEN. Theory of Medicine, and Materia Medica, by Dr. CURRY and Dr. CHOLMELEY. Midwifery, and Diseases of Women and Children, by Dr. HAIGHTON. Physiology, or Laws of the Animal Economy, by Dr. HAIGHTON. Structure and Diseases of the Teeth, by Mr. FOX.

These several Lectures are so arranged, that no two of them interfere in the hours of attendance; and the whole is calculated to form a complete course of medical and chirurgical instruction.

Theatre of Anatomy, Bartlett's Court, Holborn.—Lectures on Anatomy, Physiology, Pathology, and Surgery, by Mr. JOHN TAUNTON, F.A.S. Member of the Royal College of Surgeons of London, Surgeon to the City and Finsbury Dispensaries, City of London Truss Society, &c. will commence on Saturday, October 8, at eight o'clock in the evening precisely, and be continued every Tuesday, Thursday, and Saturday, at the same hour.

Dr. RAMSBOTHAM will begin his winter Course of Lectures on the Science and Practice of Midwifery, including the Diseases of Women and Children, on Thursday, October 6th, at his house, No. 9, Old Jewry.

Theatre of Anatomy, Blenheim-street, Great Marlborough-street. —The autumnal Course of Lectures on Anatomy, Physiology, and Surgery, will be commenced on Saturday, the 1st of October, at two o'clock, by Mr. BROOKES.

Anatomical Converzationes will be held weekly, when the different subjects treated of will be discussed familiarly, and the student's views forwarded. To these none but pupils can be admitted.

Spacious apartments, thoroughly ventilated, and replete with every convenience, are open all the morning, for the purposes of dissecting and injecting, where Mr. Brookes attends to direct the students, and demonstrate the various parts as they appear on dissection.

Dr. PEARSON, having delivered distinct Courses of Lectures, during twenty-six years, on the Theory and Practice of Physic, on Chemistry, on the Materia Medica, with Medical Botany, purposes in future to confine himself to the subject of the Laws of the Animal Œconomy and the Practice of Physic. His Course will commence the first week of October, as usual, in George-street, Hanover-square, from nine till ten every morning. The Lectures in the other departments, viz. on the Materia Medica, on Demonstrative Pathology, with Clinical Lectures on Medical Jurisprudence, will be delivered by Dr. ROGET and Dr. R. HARRISON; and a full Course in Chemistry will be given by Dr. JOHN DAVY, at the Theatre in Windmill-street.

Dr. CLARKE and Mr. CLARKE will begin their winter Course of Lectures on Midwifery and the Diseases of Women and Children, on Tuesday, October 4th. The lectures are read every morning from a quarter past ten to a quarter past eleven, at Mr. Clarke's house, No. 11, Saville-row, for the convenience of students attending the Hospitals.

Dr. CLOUGH commences his autumnal Course of Lectures on the Science and Practice of Midwifery, including the Diseases of Infants, on Monday the 10th of October.

Dr. MERRIMAN will commence his usual Course of Lectures at the Middlesex Hospital, on Monday, October 3d, at half-past ten o'clock. These Lectures embrace a general view of the Theory and Practice of Midwifery, and the Diseases of Women and Infants.

Dr. CLUTTERBUCK will begin his autumnal Course of Lectures on the Theory and Practice of Physic, Materia Medica, and Chemistry, on Wednesday, October the 5th, at ten o'clock in the morning, at his house, No. 1, in the Crescent, New-Bridge-street, Blackfriars.

Anatomical Theatre, Lower College-street, Bristol.—Mr. THOMAS SHUTE will commence his winter Course of Lectures on Anatomy, Physiology, and Surgery, on Saturday, October the 1st, at eight o'clock in the morning.

Monthly Prices of SUBSTANCES *used in* PHARMACY,

At *Messrs.* SELWAY and HENLEY's (Chemical and Pharmaceutical Laboratory,) 35, Upper Mary-le-bone Street, Portland Place.

Acetum Scillæ	lb.	2s.	0d.	Cambogia opt.	9s.	6d.
Abietis Resina		2	3	Camphora	8	6
Acaciæ Gummi		2	3	Canella Cortex	3	4
—— elect.		3	3	Cardamomi Semina opt.	12	0
—— Pulvis		3	8	Cascarillæ Cortex	5	6
Acidum Aceticum	cong.	3	6	Castoreum	onc.	4	0
—— Benzoicum	oz.	6	0	Caryophilli	lb.	11	0
—— Boracicum		2	0	Cassia Cortex		8	0
—— Oxalicum	lb.	20	0	Catechu Extractum		2	3
—— Nitricum		4	6	Cetaceum		3	0
—— Nitrosum		2	6	Cera flava		3	6
—— Muriaticum		0	8	—— alba		3	0
—— Sulphuricum		0	6	Ceratum Cetacei		3	0
—— Arom.		5	0	—— Resinæ		2	8
Alcohol sp. gr. 815	M. lb.	5	0	—— Calamina		3	0
Æther sulphur. sp. gr. 789		10	0	—— Plumbi superacet.		4	0
—— rectificatus sp. gr. 744		12	0	—— Lyttæ		4	0
Ærugo	lb.	7	0	—— Sabinæ		2	8
Aloes spicatæ extractum		5	6	—— Plumbi Carb.		3	0
—— vulgaris extractum		4	6	—— Comp.		3	8
—— Barbadoes		5	0	—— Saponis		4	6
Alumen		0	4	Cinchonæ cordifoliæ Cortex (yellow)		9	0
—— exsiccatum		0	8	—— lancifoliæ Cortex (quilled)		13	0
Ammoniæ Murias Ang.		2	9	—— oblongifoliæ Cortex (red)		16	0
—— Exot.		2	2	Cinnamomi Cortex		17	0
—— Carbonas		3	6	Coccus (Coccinella)		66	0
—— Nitras		5	6	Colocynthidis		7	6
Amygdalæ Amaræ		1	6	Copaiba		7	0
—— Dulces		5	8	Colchici Radix		3	7
Ammoniacum (Gutt.)		6	6	Cornu usti		1	6
—— (Commun.)		3	6	Cretæ ppt.		0	8
Anthemidis Flores (comi.)		1	9	Croci stigmata		60	0
—— (opt.)		2	0	Cupri sulphas		1	0
Antimonium		3	0	Cuprum ammoniatum		6	0
Antimonii Sulphuretum		1	0	Curcuma Pulvis		2	6
—— Aurum, Sulph.		7	0	Cusparie Cortex		4	0
—— Oxydum				Confectio Aromatica		8	6
—— Murias		3	9	—— Aurantii		2	9
Antimonium Tartarizatum		5	0	—— Opii		4	6
Aqua Anethi	cong.	3	0	—— Rosæ Gallicæ		1	10
—— Carui		3	0	—— Caninæ		2	0
—— Cinnamomi vera		18	0	—— Scammoniæ		15	0
—— Menthæ piperitæ		2	6	—— Sennæ		2	0
—— pulegii		2	6	—— Amygdalæ		5	0
—— Sativæ		2	6	Emplastrum Ammoniaci		8	0
—— Pimentæ		2	9	—— Cumini		2	0
—— Rosæ		5	0	—— Galbani Comp.		2	6
—— Cassiæ		3	6	—— Lyttæ		6	6
Arsenici Oxydum	lb.	1	0	—— Opii		2	6
Argenti Nitras		6	9	—— Plumbi		1	6
Assafœtida Gummi-resina		6	6	—— Resinæ		1	6
Aurantii Cortex		2	6	—— Roborans		2	0
Balsamum Peruvianum		33	0	—— Saponis		2	6
—— Tolutanum		15	0	—— Hydrargyri		2	6
Barytæ Murias		6	0	—— —— cum Amm.		6	0
Benzoinum elect.		11	0	Extractum Anthemidis	unc.	1	0
Bismuthum		3	0	—— Belladonnæ		1	0
—— Oxydum		16	0	—— Cinchonæ		3	0
—— Nitras		16	0	—— —— resinos.		4	0
Calamina præp.		0	3				
Calumbæ Radix		2	6				
Calx		1	0				

Extractum Colocynthidis	2s.	0d.
——— comp.	1	0
——— Conii	0	6
——— Gentianæ	0	5
——— Glycyrrhizæ .. lb.	3	0
——— Cascarillæ .... unc.	3	0
——— Hæmatoxyli	0	5
——— Humuli	0	9
——— Hyoscyami	1	0
——— Jalapæ 1s. 6d. Res.	2	8
——— Opii aquos	3	8
——— resinos	3	0
——— Papaveris	0	6
——— Rhæi	2	4
——— Sarsaparillæ	0	10
——— Taraxaci	0	6
Ferri carbonas ..... lb.	1	2
—— sulphas	1	0
Ferrum Ammoniatum	3	6
——— Tartarizatum	4	0
Galbani Gummi-resinæ	8	6
Gentianæ Radix	1	3
Guaiaci Resina	6	0
Hydrargyrus purificatus	5	6
——— cum Creta	8	6
Hydrargyri Oxymurias	8	0
——— Submurias	8	6
——— Hydros.	10	0
——— Nitrico-Oxydum ..	8	6
——— Oxydum Cinereum	16	0
——— Rubrum	5	0
——— Sulphuretum Nig.	3	6
——— Rub.	8	0
——— Præcipitatus Alb.	8	0
Hellebori nigri Radix	2	6
Ipecacuanhæ Radix	20	0
——— Pulvis	21	0
——— Compos. Pulv. lb.	8	0
Jalapæ Radix	6	0
——— Pulvis	6	6
Kino	12	0
Liquor Plumbi Acetatis M. lb.	1	0
——— Ammoniæ .... P.L.	2	8
——— Arsenicalis	3	0
——— Potassæ	0	9
——— Vol. Corn. Cerv.	1	0
Linimentum Camphoræ comp.	5	6
——— Saponis comp. ..	5	6
Lichen Islandicus ..... P. lb.	1	9
Lini Semina	0	6
—— Pulvis	0	4
Lyttæ	10	0
Magnesia	8	6
——— Carbonas	3	0
——— Sulphas	1	2
Manna optima	6	6
——— communis	5	0
Mel Rosæ	2	6
—— Despumat	3	0
Mices Moschatæ	25	0
Moschus pod, 24s. in gr. unc	40	0
Mastiche ..... lb.	5	6
Myristicæ Nuclei	25	0
Myrrha elect.	6	6
Olibanum	3	0
Opoponax	23	0

Opium (Turkey)	34s.	0d.
Opium (East India) ..... lb.	32	0
Oleum Amygdale ..... lb.	3	8
—— Anisi ..... unc.	2	6
—— Anthemidis	5	0
—— Cinnamomi Cassiæ	8	6
—— Caryophili	5	0
—— Cajuputi	8	0
—— Carui	1	3
—— Juniperi	0	9
—— Lavandulæ	4	0
—— Lini ..... cong.	8	6
—— Menthæ piperitæ unc.	4	6
——— viridis	3	0
—— Olivæ opt. cong.	24	0
——— secundum	16	0
—— Origani ..... unc.	2	0
—— Pimentæ	4	6
—— Ricini optim. (per bottle)	10	0
——— secund.	7	0
—— Rosmarini ..... unc.	0	9
—— Succini .. 2s. 4d. rect.	2	6
—— Sulphuretum ..... lb.	1	6
—— Terebinthinæ rectif. ..	2	0
Oxymel Scillæ	3	0
Papaveris Capsulæ (per 100)	2	4
Plumbi Carbonas ..... lb.	0	8
——— Superacetas	2	2
——— Oxydum semi-vitreum	0	6
Potassa Fusa ..... unc.	0	6
—— cum Calce	1	6
Potassæ Nitras ..... lb.	1	0
——— Acetas	8	0
——— Subcarbonas	1	2
——— Carbonas	4	0
——— Sulphas	1	0
——— Sulphuretum	1	6
——— Supersulphas	3	0
——— Tartras	3	0
——— Supertartras	1	2
Pilulæ Hydrargyri	4	6
——— Aloes comp.	8	0
——— cum Colocynth.	16	0
——— Saponis cum Opio ..	16	0
——— Scillæ Compos.	6	6
——— e Styrace	32	0
Piper longum	2	6
—— Nigrum ..... lb.	2	6
Pimento ..... lb.	2	6
Pulvis Aloes cum Canella ..	6	6
——— Compositus	10	0
——— Antimonialis	7	0
——— Cinnamomi Comp ..	16	0
——— Cornu cervi cum Opio	16	0
——— Cretæ Composit.	8	0
——— cum Opio	9	0
——— Kino Compositus	12	0
——— Scammoniæ Comp. unc.	2	6
——— Sennæ Composit. .. lb.	8	0
——— Tragacanthæ Comp. ..	5	0
Resina Flava	0	5
——— Nigra	0	5
Rosæ Folia	9	0
Ra. Quassiæ	1	6
Rhæi Radix (Russia)	30	0
——— (East India)	18	6

Rhæi Radix Pulvis	14s.	6d.
Sapo (Spanish)	2	6
Sarsaparilla Radix Inc.	5	0
Scammoniæ Gum Resina unc.	2	6
Scillæ recens	1	3
—— siccata	5	0
—— pulvis	6	0
Senegæ Radix		
Sennæ Folia Opt. Alexand.	6	6
Serpentariæ Radix	30	0
Simaroubæ Cortex	4	0
Sodæ Boras	4	6
—— Carbonas	7	0
—— Subcarbonas	1	4
—— exsiccata	2	8
Sinapis super.	2	6
—— secund.	2	0
Sodæ Sulphas	0	8
—— Phosphas	2	8
—— Acetas unc.	0	10
Soda tartarizata lb.	2	4
Spongia usta unc.	1	3
Spiritus Ammoniæ M. lb.	3	6
—— aromaticus	4	6
—— fœtidus	3	6
—— succinatus	4	6
—— Cinnamomi ver.	3	6
—— Juniperi Compos.	3	0
—— Lavandulæ	4	6
—— Compos.	5	0
—— Myristicæ	3	6
—— Pimentæ	3	0
—— Rosmarini	3	6
—— Ætheris Aromaticus	6	0
—— Compositus	6	0
—— Nitrici sp. gr. 860	5	6
—— Sulphurici	6	0
—— Vini rectificatus	26	0
Syrupus Aurantii	1	8
—— Rutæ	1	8
—— Papaveris	2	0
—— Violæ	2	10
—— Rhei	2	10
—— Rhamni	2	0
—— Croci	3	0
—— Tolutanus	2	0
—— Rheados	2	0
—— Mori	2	6
Sulphur	0	6
—— Lotum	1	0
—— Præcipitatum	1	0
Tamarindus opt.	2	6
Terebinthina Vulgaris	0	9
—— Canadensis	8	0
—— Chia	6	0
Tragacantha Gummi	10	0
—— Pulvis	10	6
Tinctura Aurantii M. lb.	3	9
—— Aloes	4	0
—— Composita	9	6
—— Assafœtidæ	5	6
—— Balsa. Tolut.	5	6
—— Benzoini Comp.	6	9
—— Camphoræ Comp.	4	0

Tinctura Cardamomi	4s.	0d.
—— Comp.	4	0
—— Columbæ	3	9
—— Capsici	3	9
—— Cascarillæ	4	6
—— Castorei	7	0
—— Catechu	4	0
—— Cinchonæ	6	0
—— Compos.	6	0
—— Cinchonæ Ammon.	7	0
—— Croci	6	6
—— Digitalis	4	6
—— Ferri Ammoniati	4	8
—— Cinnamomi	4	6
—— Comp.	4	6
—— Gentianæ Comp.	4	0
—— Guaiaci	6	0
—— Ammon.	6	0
—— Hellebori Nigri	4	6
—— Humuli	5	0
—— Hyoscyami Nig.	4	6
—— Jalapæ	4	6
—— Japonica	4	6
—— Ferri Muriatis	4	8
—— Kino	5	0
—— Lyttæ	3	9
—— Myrrhæ	4	6
—— Opii	7	0
—— Camphorat.	4	6
—— Quassiæ	3	9
—— Rhei	4	6
—— Comp.	4	0
—— Scillæ	4	6
—— Sennæ	4	9
—— Serpentariæ	6	0
—— Valerianæ	5	6
—— Amm.	4	6
—— Zingiberis	5	6
Valerianæ Radix	1	8
Veratri Radix	1	6
Unguentum Hydrargyri fort	5	0
—— Mit.	3	0
—— Nitratis	3	3
—— Nitrico-oxy.	2	9
—— Sulphuris Comp.	1	9
—— Sambuci	2	0
—— Virio	1	8
—— Altheæ	2	0
—— Cetacei	3	6
—— Veratri	1	8
—— Zinci	2	0
—— Hyd. præcip. Alb.	3	0
—— Picis	1	6
Uvæ Ursi Folia	2	4
Vinum Aloes	3	6
—— Antimoniale	3	0
—— Ferri	3	6
—— Ipecacuanhæ	5	6
—— Opii	8	0
Zinci Oxydum	4	6
—— Sulphas purif.	2	0
—— Acetas unc.	1	6
Zincum lb.	1	6
Zingiberis Radix opt.	2	4

French Leeches, equal to English, 25s. per hundred, or 3s. 6d. per dozen.—English ditto, true, 12s. per dozen.—Essential Salt of Lemons, 4s. 6d. per dozen.

METEOROLOGICAL REGISTER.

From July the 25th, to August the 25th, 1814.

Kept by C. BLUNT, Philosophical Instrument Maker, No. 38, Tavistock-Street, Covent-Garden.

Moon.	Day.	Wind.	Barometrical Pressure. Max.	Min.	Mean.	Temperature. Max.	Min.	Mean.	
	26	SW	29·90	29·78	29 847	82	59	68 6	Fair
	27	SW	29·97	29·95	29·965	83	65	72·3	Fair
	28	SW	29·90	29·75	29·79	94	65	78	Fair
	29	SW	29·85	29 79	29·82	85	58	71·3	Fair
	30	SW	30·05	29·91	29·995	75	57	65·6	Fair
	31	SW	30·—	29·94	29 97	84	54	68	Fair
○	1	SbyW	29·90	29·89	29 893	84	56	68·3	Fair
	2	SW.	30·02	30·—	30·015	83	57	68·6	Fair
	3	SSW	29·98	29·94	29·957	85	54	68·6	Fair
	4	WSW	30 08	30·03	30·063	77	55	66·6	Fair
	5	W.	29·84	29·75	29·775	76	54	66·6	Fair, Showery
	6	WbyN	29·83	29 73	29·776	76	56	65·6	Fair, Cloudy
	7	WbyN	29·80	29·72	29 76	77	57	66·3	Fair, Cloudy, Show. du Night
◑	8	W	29·70	29·69	29·695	71	51	62 6	Fair, Cloudy
	9	NW	30·—	29·80	29·93	72	53	61 3	Fair, Clear
	10	NW	30·—	30·—	30·—	72	54	62·6	Fair
	11	W	30·08	30 03	30·057	74	56	64·3	Fair
	12	W	30·08	30·03	30·045	76	55	65·3	Fair
	13	W	29·95	29·86	29·903	79	56	67·3	Fair
	14	NW	29·86	29·86	29·86	80	57	68	Showery
●	15	NW	29·89	29·86	29·892	81	59	69·3	Fair
	16	W	29·84	29·79	29·802	65	58	61·6	Fair
	17	W	29·95	29·90	29·932	68	56	61·3	Fair
	18	W	30·—	29·97	29·992	66	57	61·3	Showery
	19	NW	30·—	29·94	29·965	70	56	62·6	Fair
	20	NW	29·97	29·95	29·985	68	55	62	Fair
	21	N	29·95	29·80	29·875	70	57	63·6	Showery
◐	22	W	29·83	29 83	29·83	71	55	62	Showery
	23	SbyN	29 70	29·64	29·67	72	55	62	Fair
	24	NE	29·64	29·56	29·84	74	56	63	Rain all Night
	25	W	29 60	29·57	29·589	71	56	62	Showery

RESULTS.

Mean barometrical pressure 29·887		Mean temperature	62·85 deg.
Maximum 30·08	wind at W	Maximum 94,	wind at SW
Minimum 29·56	—— NE	Minimum 51,	—— W

Scale exhibiting the prevailing Winds during the Month.

N	NE	E	SE	S	SW	W	NW
1	1	0	0	1	9	11	8

	Mean barometrical pressure.	Mean temperature.
From the full moon on the 1st August, to the last quarter on the 8th	29·891	67·2
—— last quarter, to the new moon on the 15th	27·355	64·48
—— new moon, to the first quarter on the 22d	29·930	63·1

MONTHLY

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Essay on the Cow-Pox; by Dr. Francesco Calcagni, Physician of the Spedale Grande; to serve for advice to the people and instructions to young physicians and surgeons to practise or direct inoculation, and preserve the matter; Palermo, 1809.

Essay on the Cow-Pox found in the Bocca di Falco, a village near Palermo, in the month of April, 1811; by Dr. Giov. Battista Amati; Palermo, 1811.

NOTICES TO CORRESPONDENTS.

We are indebted to Mr. Burroughs for an Account of an Inflammatory Fever which prevailed in the 24th Regiment, while in Portugal; also to Mr. Yeatman, for his valuable Communication, which, with others unavoidably postponed, will appear in our next.

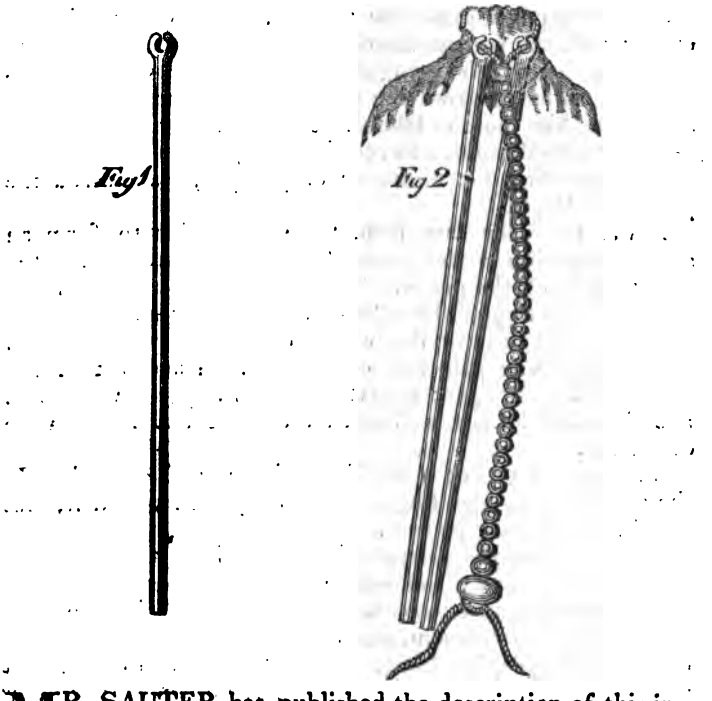
THE
Medical and Physical Journal.

4 OF VOL. XXXII.] OCTOBER, 1814. [NO. 188.

" For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work to which the faculty in EUROPE and AMERICA were under deeper obligations than to the Medical and Physical Journal of London, now forming a long, but an invaluable series."—RUSH.

For the Medical and Physical Journal.

Description of an improved Instrument for the Removal of Polypus Uteri, with a Case; from the German of Mr. Sauter; by Mr. WANT.



MR. SAUTER has published the description of this improved instrument for the removal of polypi of the womb, accompanied with four cases in which it has been used with success. One of these is of sufficient importance to be generally known, and will serve to show the manner of treating this distressing complaint.

A woman, 35 years of age, for these five years past has been subject to uterine hæmorrhages, and latterly to retention of urine and fæces, which threatened her life. A variety of physicians have been consulted, but the cause of the symptoms remained a long time in obscurity. As it became eventually necessary to evacuate the contents of the bladder by means of a catheter, it was discovered that the retention was occasioned by a solid and voluminous mass, which occupied the lower part of the pelvis. Oswald de Sommini, an ignorant and rash surgeon, who had attended the patient during her retention of urine, conceived, that by removing the solid and extraneous body, a radical cure might be obtained. He determined to perform the operation. He forcibly passed the hand into the womb, for the purpose of grasping and tearing away the mass, and exhorted the patient to commend her soul to God. He now made several attempts to grasp the tumour, but happily without effect; and, the woman fainting, he was compelled to abandon the project. She struggled another year with her afflictions, suffering from the most violent spasms and expulsive pains, like those of labour. At length, Dr. Aepli being called in consultation, allayed the irritation, and, very properly suspecting the existence of polypus, transferred the patient to Mr. S.

It was not very easy from the examination to form an accurate opinion of the mass. It was firmly pressed into the lesser cavity of the pelvis. The abdomen above the navel was hard and large, like that of a woman six months pregnant; and the form of the womb was distinctly recognised. The patient was pale and extenuated, on account of her frequent hæmorrhages; nevertheless, her appetite was good, and she was tolerably well when the urine and fæces were evacuated.

The tumour was of a pyriform shape, and smooth. In the examination, the finger could be passed round it, but could not reach the pedicle.

The nature of the disease being ascertained, the operation was performed in the following manner:—After passing the noose of the ligature into the holes of the whalebone conductors, he carried them, in contact with each other, on the fore-finger of the left hand, to the posterior and upper part of the polypus. He fixed one, while he carried the other round the tumour to its anterior part; then he did the same to that which was fixed, bringing it round on the opposite side, and connecting them together anteriorly. He pushed up the little balls on the ligatures, until the upper one reached the holes of the whalebone, and the ligature encircled

circled the *base of the tumour*. Before he withdrew the conductors, he made a surgeon's knot at the lower extremity of the balls, by which means the neck of the tumour was firmly embraced. They were then withdrawn; and the whole operation was attended with little or no pain.

The part included in the ligature was ten inches from the orifice of the vagina; and the instrument, after being brought in contact on the anterior part of the tumour, was distinctly felt at the fundus of the uterus above the navel.

The two first days after the operation were good; but on the third, when the polypus tumefied, pains came on similar to those of labour, and the urine and fæces were completely suppressed. The ligature was again tightened as much as possible, which was repeated from day to day, and the flow of urine was assisted by lifting upwards the polypus. On the sixth day, phlyctenæ, occasioned by the mortification, evacuated much glairy and putrid matter, and the patient was much relieved. On the tenth day the separation of the tumour was complete, but the polypus remained in the pelvis, from which it was extracted with the forceps. Before the operation, it was supposed to have weighed at least a pound, since which she has been delivered of one child, and is again pregnant.

For the Medical and Physical Journal.

On an Inflammatory Fever which prevailed in the 24th Regiment in 1813; *by* G. F. Burroughs, of Bristol.

OF all the diseases incident to the human frame, there are none so strongly characterised as those that prevail among soldiery at camps. How far this circumstance arises from the labour, fatigue, and irregular repose which soldiers on service undergo, I shall not here determine.

The disease which I am about to notice, prevailed to an alarming extent in the British army in Portugal, at the commencement of the year 1813, under the type of inflammatory fever. The summer preceding had been very fine; the troops had been constantly in motion from the month of May (at which period they broke up from their cantonments) to the middle of November. The halting places were in general good; and the men suffered no inconvenience from the night dews. The latter end of September, and the greater part of the month of October, was very cold and rainy; and the right wing of the army was vigorously employed in besieging Burgos. The duties of the soldier were at this time very severe, and particularly of those employed in the

trenches. Towards the latter end of October, the troops broke up from Burgos, and retreated to Portugal. In this retreat it was impossible to avoid feeling all those privations which retreating armies are necessarily exposed to—want of due rest, scarcity of provisions, and, above all, wet grounds (from the inclement and unfavourable state of the weather) for *bevouac*, so that the troops were scarcely ever dry.

It was not until the beginning of December that the troops occupied their respective cantonments, part remaining on the south bank of the river Douro, and part the north-west side of the river Coa. On their gaining these stations, the troops were regularly supplied with their usual allowances of bread, meat, and wine. My own battalion occupied a village on the western side of the Estrella mountains, by which it was sheltered from the bleak cold winds that are apt to blow for a long time from the east at this season of the year. Its situation was healthy, and a limpid stream ran through it. We were not here many days before the sick list was considerably increased, for hitherto the regiment had been very healthy, indeed as long as the men were actively employed it suspended disease.

The men were taken sick generally when on duty, and were brought to the hospital labouring under these symptoms:—cold rigors, with alternate flushes of heat; pains in the forehead, back, and lower extremities; vomiting of yellow, and often inspissated bile, now and then accompanied with the discharge of long and round worms; pulse quick; tongue furred, though sometimes clean; and great irritability of the pupils. These symptoms were not unfrequently attended by a short and dry cough, with sensations of pain referred to particular parts of the thorax or abdomen.

Of the treatment of this disease, which I have before observed was of an inflammatory kind, not a doubt could be entertained; but the repeated fatigues our soldiers had undergone had reduced them to a very emaciated state, and we could not well ascertain how far the antiphlogistic treatment could be carried. Emetics, the common routine practice of the army, were primarily administered, but their operation so powerfully disturbed the sensorium, that they were afterwards forbidden,—indeed we found our patients in general much worse after their use. Purgatives, particularly calomel combined with the extract of colocynth, were administered in moderate doses with considerable effect.

Towards evening the symptoms were uniformly increased. The skin became hot, with no disposition to moisture; respiration laborious; and pain in the head acute: there was also

also a bad taste in the mouth, and the tongue was white, with very red papillæ. Even in the patient's countenance there was a wildness, bordering on delirium, and an unusual rapidity of utterance. Venesection was instantly enforced, and the blood was drawn from large orifices, and in pretty large quantities, the pulse often rising under the operation with a fullness and hardness truly formidable. The blood drawn did not uniformly put on the buffy coat, but contained much crassamentum, with a smaller quantity of serum than usual.

On the second day, the symptoms continuing, we found it necessary to repeat the venesection twice, sometimes thrice, in the course of the twenty-four hours, and to assist the operation of the purgative, by the administration of an enema. On the third day, if there was no sign of amendment, if the evacuations both by the bowels and blood-letting had not contributed to arrest the phlogistic diathesis, if, with increased heat, the skin retained its rough and dry feel, then delirium intervened, and the patient expired under the most accumulated suffering.* But it was not an unfrequent occurrence, that in the course of twelve or sixteen hours from the first attack, a copious perspiration would break out on the whole surface of the body, and continue some hours, during which time the blankets would be completely moistened with the secreted matter.

This inflammatory fever ran through half the 24th regiment, and there was no doubt of its being contagious from the circumstance of the orderlies, or soldiers who attended on the sick in hospital, receiving the disease. These were generally seized with vertigo, shivering succeeded by vomiting, either on the first or second day; and so great was the dread the soldiers entertained of the unhealthiness of the hospital, that it was only through coercion they were induced to attend it. The women who were employed in washing the linen for the hospital, received the disease, and one of them died.

Of one hundred and sixty-five cases that were treated by blood-letting, and according to the antiphlogistic system, six only terminated fatally, and that at the commencement of the disease. The dissection of these cases gave us very satisfactory information, inasmuch as we found either inflammation of the pleura, with adhesion of the lungs to the thorax, or of the peritoneal coat of the stomach, and small

* In other instances, where the symptoms did not exhibit themselves so strongly, and where debility was very predominent, life was protracted to the seventh or tenth day.

intestines.

intestines. The liver and spleen were generally found enlarged, and not unfrequently scirrhus. Though these morbid appearances presented themselves on viewing the cavities of the thorax and abdomen, there were no less formidable ones on the external parts of the body; and such was the impoverished state of these subjects, that gangrene of the lower extremities, and lividness of the tip of the nose, had commenced at the very time they were labouring under visceral inflammation, so unequally were the powers of life distributed.

Whether this disease owed its origin to the affection of any individual organ, I am not well satisfied; certain it is, the symptoms of local inflammation were not decided, at its first appearance, but afterwards we found either the thoracic or abdominal viscera partaking highly of inflammatory action, for which, with other depleting remedies, blistering the affected part was very serviceable.

It is a fact worth recording, that of those men who were bled, the orifices made in their arms never kindly healed, until the inflammatory disposition of the system had disappeared. The edges of the wound became inflamed and hard, sometimes even affecting the glands in the axilla.

In some constitutions, particularly the robust, the fever was always more violent; and the passage of the urine along the urethra was attended with the most indescribable anguish.

I have observed that the blood drawn from the patients did not uniformly cup, and put on the buff colour, but in most cases it did, and at the very time it was flowing from the arm.*

Bleeding was so important a remedy, and the disease was so early arrested by its vigorous and timely enforcement, that our practice bore a strong analogy to the observation made by Sir John Pringle, when speaking of the disorders that prevailed in Flanders in the winter of 1745, and which were also of the inflammatory kind. "The physician of the army," he says, "believed the surgeons and apothecaries of the place more than half instructed about the cure of the patients committed to them, when he had inculcated the necessity of large and repeated bleedings."

The subjects of this fever, (which may be regarded as the synocha of Cullen) either by its ravages, by the remedies employed, or from previous fatigue, or perhaps from the

* The subsidence of the blood is by no means an invariable criterion of the existence of inflammation; and, where there were evident pulmonic symptoms, the blood coagulated, as when in a healthy state.

operation

operation of all these cases, were uniformly left in a very exhausted condition, and required the greatest attention both to their regimen and exercise, during convalescence; and to this attention we had to congratulate ourselves that our relapses were but few, and yielded to gentle treatment.

"Inflammatory fevers of an army, differ from others only in being more violent," observes Sir John Pringle, and perhaps it is only in an army actively employed, that diseases assume the more formidable aspect. The complaint I have detailed was of this nature, and demanded prompt and decisive practice. It prevailed through the whole of the army, and the mortality was greater than the loss we had experienced the preceding summer, in the battle of Salamanca, and siege of Burgos.

In those corps where venesection was delayed, or only little resorted to, the mortality was very great; but in those who employed it early, the mortality was inconsiderable.

G. F. BURROUGHS, Surgeon,
And late Assistant Surgeon of the 1st Dragoons.
28, *Park-street, Bristol.*

For the Medical and Physical Journal.

Bad Effects of Vænesection in Cases of Poison from Opium; by Mr. JOHN C. YEATMAN, Surgeon, of Bristol.

BLEEDING is recommended and occasionally practised in the treatment of persons labouring under the sedative effects of an over-dose of opium; but, as I am acquainted with two cases which under the use of the lancet proved fatal, I am only performing a duty to society by recording them.

In the first case it will be seen that death immediately followed the sudden loss of blood from the temporal artery, although re-action had taken place: in the second, dissolution was the immediate consequence of opening the jugular vein whilst the patient was under the sedative influence of an over-dose of laudanum. It will be likewise seen, that the same plan of treatment which I so successfully adopted in the case of Mr. J. B., as narrated in your Journal for June, (vol. 31, page 468,) was pursued with the same striking advantage in one before us; and whilst it goes to condemn the early use of the lancet, it serves as an additional proof of the happy effects resulting from the employment of active emetics, vegetable acids, and powerful stimuli.

CASE I.—In one of the spring months of the year 1798, my father was sent for, between the hours of eleven and twelve, p. m. to Mr. Myers, in Philadelphia, America, who had

had swallowed, during the afternoon and evening, three drachms of opium. Mr. M. had been in the habit of keeping that drug in his pocket, and of biting off a morsel occasionally, "to allay passion," as he afterwards expressed himself, but had never before exceeded a few grains in the twenty-four hours. He was a middle-aged man, of the choleric temperament, and attempted to poison himself during a protracted altercation with his wife.

On visiting the patient, he was found in a state of insensibility; the eye-lids were closed, and the pupils dilated; the visage was pale and ghastly, and a clammy perspiration bedewed the forehead; the inferior maxilla was fixed to its fellow; the hands were clenched; the skin was cold; the breathing was slightly performed at long intervals, and the pulse small and intermitting.

The mouth being forced open, two scruples of the sulphat of zinc in solution were thrown into the stomach, and after irritating the fauces with a feather, a small quantity of its contents was discharged. A table-spoonful of mustard mixed in warm water, and sharpened with vinegar, vomited him freely, and the volatile alkali citric and acetic acids diluted were alternately administered. These means succeeded in restoring animation. The pulse began to beat more distinctly and regularly; a general warmth ensued; at length he was enabled to stand, and with assistance to walk up and down the room.

At eight o'clock, a. m. he spoke very rationally, was able to move about without help, and merely complained of slight headach, drowsiness, and weakness. A purgative was prescribed, and he was directed to drink plentifully of the vegetable acids and strong coffee.

In the course of the morning he appeared in every respect likely to do well—entered into a conversation on the enormity of attempting to destroy his life—and expressed much gratitude for the exertions that had been made towards his recovery.

My father again visited his patient in the afternoon, when, to his great astonishment, he found him on the bed in articulo mortis!—On inquiring the cause of this lamentable reverse, he was told that a physician, (through the interference of an officious friend, and without the knowledge of the patient,) had been sent for, who had taken nearly fourteen ounces of blood from the temporal artery. Mr. M. sunk under the operation, and died, as in a swoon, shortly afterwards.

Case II.—A man, æt. 40, admitted into hospital for some trivial complaint, was in a few days seized in a way which induced the medical gentlemen in attendance to consider

sider him affected with apoplexy, and under that impression took sixteen ounces of blood from the jugular vein. This man suddenly sunk under the bleeding, and expired without a struggle immediately after. It was subsequently known, that he had been labouring under the effects of an over-dose of laudanum.

Bleeding has been thought proper in these cases, with a view to obviate congestion of blood in the brain and lungs. A celebrated physician, Dr. Cullen, has laid down the following "general directions" for their recovery; observing, however, that he cannot "treat this subject completely."

"When the poison taken into the stomach, or otherwise applied to the body, has already induced an apoplectic state, as those causes do commonly at the same time occasion a stagnation, or slower motion, of the blood in the vessels of the brain and of the lungs, so it will generally be proper to relieve this congestion, by taking some blood from the jugular vein, or from the veins of the arm." The doctor then goes on to observe: "Upon the supposition of a congestion in the brain or lungs, it will generally be proper to relieve it by means of acrid glysters, producing some evacuation from the intestines." And, also, "When these evacuations by blood-letting and purging have been made, the various stimulants which have been commonly proposed in other cases of apoplexy, may be employed here with more probability and safety," &c.

The principle being stated on which bleeding is founded in these cases, I will in the next place endeavour to ascertain in some degree the manner in which opium produces its effects in the animal system, and then proceed with great deference to suggest a few observations against the early use of the lancet. I need hardly observe, that it will be found extremely necessary to extract blood after the sedative effects of an over-dose of opium have been counteracted, should the balance of power be in favour of the heart and arteries.

The authors on the modus operandi of opium are numerous and celebrated; and the experiments and observations of Mead, Alston, Whytt, Fontana, Wilson, and others, are by far too extensive to enter largely upon them in this paper.

Mead imagines, that a poison may destroy life by acting on the nerves of the stomach and intestines, without being conveyed into the blood.

Alston conceives, that opium acts on the system in general, through the medium of the nerves to which it is applied.

Whytt says, "it remains, therefore, that opium, by affecting the extremities of the nerves of the part to which it is applied, does, by means of their connection and sympathy

with the spinal marrow, destroy or prevent, through the whole nervous system, the operation of that power upon which depends sensation and motion in the bodies of animals."

Monro considers that opium, applied to the internal surface of the primæ viæ, operates more speedily, and in some cases more violently, through the nerves alone, than by absorption.

Cullen says, "the fumes rising from burning charcoal, the fumes of mercury, of lead, and of some other metallic substances; opium, alkohol,* and many other narcotic poisons; to all which I would add the power of cold, of concussion, of electricity, and of certain passions of the mind, produce apoplexy by directly destroying the mobility of the nervous power."

Concerning the influence of opium on the heart, Dr. Wilson has instituted some experiments to prove that that drug, applied to the coats of the blood-vessels, destroys their muscular power.† "Having adapted the web of a frog's foot to a microscope, I injected eight or ten drops of a solution (nearly as strong as the stronger solution) under the skin of the leg. In a few seconds the circulation became languid, and no motion could be perceived in some of the larger blood-vessels. It gradually became more obscure in the rest, till, in the space of about two or three minutes after the injection of the opium, it ceased altogether. Nor did this interruption of the circulation proceed from any general affection of the system, since the motion of the blood still continued in the other foot. This experiment was made three times in the same manner with the same result."—(For a further account of these experiments, see his Essay.)

Considering then that opium destroys the muscular power of the blood-vessels to which it is applied, it follows, when that drug is swallowed in large quantity, that the circulation of the blood in the branches and trunks of the right and left gastro-epiptoic arteries, the coronaria ventriculi, hepatica, splenica, superior and inferior mesenteric, will be impeded, and its return from the stomach, liver, spleen, pancreas, and

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* Brodie has shewn by experiments on the different modes in which death is produced by certain vegetable poisons, (recorded in the Philosophical Transactions for the year 1811,) that *alkohol*, the essential oil of bitter almonds, the juice of the leaves of aconite, the empyreumatic oil of tobacco, and the woorara, produce death, by destroying the functions of the brain.

† "Opium, it was found, destroys the power of action in all the muscles to which it is immediately applied."—*Wilson's Essay on Opium.*

intestines,

intestines, to the inferior cava, will be prevented, and, "one great source by which the heart is usually supplied with blood being in this manner suddenly cut off, it will send out a smaller quantity at each contraction; and, not being able, any more than the aorta and pulmonary arteries, immediately to adapt itself to the diminished quantity of blood, the latter will not be propelled with the same force as before, which will speedily retard, if not interrupt, the circulation, not only in the minute vessels of the extremities, (as we have seen exemplified in Dr. Alston's experiments,) but in the whole arterial system; the venous circulation will also be carried on in a very languid manner; the processes of secretion and excretion will cease almost universally; the skin will become cold, and lose its colour," &c.*

The narcotic and sedative effects of an over-dose of opium soon, and in some instances almost immediately, become manifest by giddiness, aversion to motion, dulness of the eyes, stupifaction, sleepiness, a loss of voluntary power, a cessation of the functions of the brain, an interruption to the performance of respiration, a languid and irregular action of the heart and arteries, coldness, convulsions, and death.

The energy of the nerves of the stomach and small intestines are greatly impaired or wholly destroyed by the extensive application of opium to those parts; and, through the medium of the eighth pair of nerves, the functions of the brain and power of the whole nervous system are suspended. Hence a state of insensibility, a loss of voluntary motion, an interruption to the performance of respiration,† universal coldness,‡ and a dilated pupil.

The small and scarcely perceptible pulsation of the heart and arteries, may be the consequence of the interruption of the circulation in the chylo-poietic and assistant chylo-poietic viscera. The check offered to the blood's passage through the lungs, and the deprivation of that quantum of nervous energy which is necessary to enable the heart and arteries to contract upon their contents, the stagnation of the blood in the vessels of the brain and of the lungs, will be the effect of a languid circulation, and the impediment given to its passage through the pulmonary vessels. Convulsions would

* Ward on Opium, Med. and Phys. Journal, vol. viii. p. 329.

† It has been also shewn, that the brain is directly necessary to the action of respiration.

‡ Mr. Brodie has proved by experiments (related in a paper read before the Royal Society, December 20, 1810,) the brain to be directly necessary to the generation of animal heat.

appear to be the immediate effect of the opium, when it has been received into and conveyed by the blood to the brain.*

The question whether opium be a stimulant or a sedative, has long agitated the medical world; and even to this day the most eminent men differ on this subject. I am not at all disposed to enter the list of disputants, but I must observe, that the experiments and observations of most authors, and the

* Dr. Wilson perceived a solution of opium thrown into the heart pass along the aorta towards the brain, and he considered that convulsions arose from this circumstance.

The aorta was tied in twelve frogs, and, on throwing a strong solution of opium into the heart of each, that organ immediately ceased moving, and yet no convulsions supervened.

An experiment on ten frogs, in which the aorta was divided, was made with the same result.

The heart in six frogs was slit, the nerves remaining entire and uncompressed, and the heart still continuing to contract with vigour; when, on the application of a solution of opium to that organ, it instantly ceased moving, and yet no convulsions supervened.

In another experiment, "the aorta in four frogs was secured by ligature, and the auricle wounded so as to permit the blood to escape; in other two a ligature was thrown around all the vessels attached to the heart, and this organ was removed. The skull of each was then perforated; and after wounding the brain in the first four, a little of the weaker solution was dropped into it. In the other two, a few drops of a stronger solution were applied to the surface of the brain. In all of them the muscles of voluntary motion were seized with violent convulsions. They died with precisely the same symptoms which follow the injection of opium into the heart when it passes along the aorta."

Fontana, in his Treatise on Poisons, vol. i. p. 81, says, "That opium causes convulsions is owing, in my opinion, to its destroying at different times, and in an irregular way, the irritability of the muscular fibres. It is besides certain, that men and women of a delicate and weak frame, are always the most subject to convulsions; and it is not possible to suppose in these people a superabundance of animal spirits. We know that all the muscles, even in a relaxed state, preserve notwithstanding a certain tension of their fibres, which, when they are cut, never fail to contract themselves, and to enlarge the wound. When a muscle becomes paralytic, it lengthens, and its antagonist then contracts the more; which shows that the repose of the muscles depends on the equilibrium of strength betwixt the different muscles, and betwixt their different fibres. The powers thus balanced, destroy and renew themselves at every instant, without producing any motion or sensible change. This natural tension of the muscular fibres certainly depends on an equal and exact distribution of the fluids in the whole substance of the muscles. This truth is demonstrated

the symptoms, as they occur in these cases, prove, notwithstanding men may differ on the properties of opium *in general*, that an over-dose* of that drug is a *direct sedative*.

It will be said, that, by drawing blood from the head, its vessels will be more equal to contract upon their contents, and congestion will be obviated; but in attempting this are we to deprive the body of power, whilst cold and almost incapable of performing a single function?

As opium does not appear to me to endanger the life of the patient by producing "a stagnation or congestion of the blood in the vessels of the brain and of the lungs," but kills by "destroying or preventing, through the whole nervous system, the operation of that power upon which depends sensation and motion in the bodies of animals;" so I con-

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demonstrated in a dissertation which I published in the third volume of the Acts of Sienna, which was in part reprinted some time after at Lucca, with several considerable additions, and which was afterwards inserted in the first volume of my Animal Physics. But, if these muscles do not receive the same proportion of fluids, or if these fluids reach them, or are distributed amongst them with an unequal quickness and energy, the equilibrium of the mutual effort of the muscles is immediately destroyed; the strongest of them contract; and hence arise the convulsions and violent agitations of the whole frame. This is the reason why those who die of an hæmorrhage, as well as those who perish by poison, are seized with convulsions; for it certainly is not probable that the loss of blood and of strength should bear an equal proportion in every part, in every muscle, and in every fibre, whilst the circulation itself is unequal, and the muscular irritability is destroyed gradually, and in a very irregular way, according to time and circumstance."

* By an over-dose of opium, I mean a quantum capable of producing those effects which are enumerated in the cases of Mr. J. B., Mr. M., and others, and which take place *without any previous excitement*.

It is well known that a comparatively small dose of opium will accelerate the motion of the blood, and cause for a little while an increased flow of animal spirits. Hence it is generally to be seen at the toilet of the female of fashion; and hence the Turk, with his enervated frame, finds a temporary relief and pleasure in chewing it.

It is well known likewise, that a large quantity of opium may be taken without immediate injury, by persons who habituate themselves to its use. I saw a Turk under the piazzas of the great square of Valetta, in Malta, swallow half an ounce of that drug. I witnessed another on the Marina di Messina, in Sicily, take a still larger quantity; and I well recollect seeing a butcher at Baltimore, in America, drink three ounces of laudanum at a draught; observing, that it was impossible to perform his work without taking this his daily dram.

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ceive it will be first necessary to obviate this, by stimulating the nerves and destroying their energy. The cases of Mr. J. B., Mr. M., and others, show, that by exciting the action of the stomach by stimulating the muscular coats of its blood-vessels, and by rousing the energy of the nerves, *the functions of the brain and of the lungs* are restored, the blood being no longer impeded in its course, *congestion is obviated*, reaction is produced, general sensibility, warmth, and the voluntary powers return to their natural state, and the whole train of symptoms successively vanish. The hypotheses therefore founded on the supposed analogy between these cases and apoplexy, will be of little consequence while facts of the above description present themselves.

Again: if we be right in alleging that opium kills by its sedative influence *on the nerves of the primæ viæ, and through their medium by destroying the functions of the brain and the whole nervous system;* and that *the circulation is almost entirely prevented*, is not immediate bleeding very problematical? The sudden abstraction of blood, or the exhibition of any thing that will occasion *direct debility*, when the functions of the nervous and vascular systems are suspended or greatly interrupted, may deprive the body of the little power which remains, and which in this diminished state of the vis vitæ is easily destroyed.

Many practitioners consider bleeding proper, in the first instance, to obviate a determination of blood to the head, occasioned by the stimulating power of opium on the heart and arteries. A determination of blood to the head cannot, I think, take place in this manner. An over-dose of opium being a direct sedative, the heart and arteries are not invigorated but weakened, and the pulse soon becomes slightly perceptible to the touch and intermitting; whenever the above happens, it becomes apparent by an increased pulsation of the heart, carotid, and temporal arteries, an over-distension of the vessels of the neck, face, and scalp, and a redness and heat of the countenance and skin. The reverse of this is the case in a suspension of the vital powers from opium.

In the first stage of concussion of the brain, the symptoms are analogous to those of suspended animation from opium; as insensibility, loss of voluntary motion, a dilated pupil, a slow and hardly perceptible respiration, a weak and intermitting pulse, coldness of the skin, &c. Now, it is generally admitted, that the lancet will prove injurious in this stage of concussion. Mr. Hey, of Leeds, condemns bleeding "during the diminished state of the vis vitæ which immediately succeeds the injury."*

* Pract. Obs. in Surgery.

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In cases of drowning, the interruption of the function of respiration, and of the action of the heart and arteries, will cause "a stagnation of the blood in the vessels of the brain and of the lungs;" and yet here, after inflating the lungs, we immediately endeavour to restore the balance of power by active internal and external stimuli. "Bleeding," says a practical writer (Dr. Thomas), "is a remedy which is often employed in cases of a suspension of the vital powers from drowning; but the natural heat should always be somewhat restored to the body, by a pursuance of the means which have been recommended, before we attempt to open a vein." And, in the following page, "while the body is cold, and the circulation and respiration are languid, I think blood-letting would be improper. If, however, after these functions and the natural temperature are restored, the patient should remain any time *in a comatose state, with a strong full pulse*, the propriety and necessity of venesection can hardly be doubted."

When a man falls from a great height, or receives a severe blow on the trunk, whereby a great shock is given to the nervous system, he is rendered insensible, the breathing becomes scarcely perceptible, and the pulse weak and intermitting, &c. The blood not being able to pass without great difficulty from the right ventricle to the left auricle of the heart, and a languid circulation, occasion congestion in the brain and lungs. It was formerly the common practice to bleed the apparently-lifeless sufferer on the ground where he received the injury, but the intelligent practitioner will now wait for reaction and a full pulse, before he deprives the patient of power, and in the first instance he will often think it right to administer a stimulant.

We find, then, that a person labouring under concussion, recovering from drowning, or from having sustained a severe shock, is not suffered to be bled until he is in some degree restored from the immediate effects of the injury or accident, although in all these instances "a stagnation or slower motion of the blood in the vessels of the brain and of the lungs" (for which bleeding is thought right in cases of suspended animation from opium) is in a more or less degree the consequence. From all that has been said, therefore, must we not infer—

1st, That congestion of blood in the brain and lungs, occurring as it does in persons labouring under the narcotic and sedative effects of opium, vanishes, as in the above cases, on the return of the vital functions, *without occasioning any previous danger?*

2dly, That bleeding in all *these* cases will prove fatal or dangerous

dangerous if employed when the nervous and vascular systems are unable to perform their function?

The case of Mr. Myers, indeed, shows that bleeding may be fatal if adopted soon after re-action has taken place.

Numerous are the instances of recovery from the effects of of an over-dose of opium in which the lancet has not been used, but immediate recourse had to emetics and stimuli. Others again may be found in which internal stimuli alone proved successful.

Daniel Graham, æt. 35, swallowed two drachms and a half of opium, and was recovered by Mr. Sheppard, of New-York, by the exclusive exhibition of diluted brandy and wine. The opium had been in the stomach three hours before any thing was given him.*

I consider the cases of Mr. J. B. and Mr. M. striking instances of the dependance to be placed on the prompt and combined use of active emetics. Vegetable acids and powerful stimuli, and mustard, appears to be an excellent emetic and stimulant in these cases.

A very interesting case of apparent death from a large dose of opium, is related by Thomas Whately, Old Jewry, and communicated by the late Dr. William Hunter, in which recovery followed the repeated use of tartarized antimony, given to excite vomiting, and the inflation of the lungs.† On the other hand, I have known persons die from the effects of opium, when an emetic only has been administered.

John Danvers, æt. 60, swallowed six drachms of laudanum. This circumstance was not known for some hours, when an emetic of the sulphat of zinc was given, but without effect. He died before other means were tried. The next day I was present at the examination of the body. The vessels of the brain were full, without being in a state of over-distention. I did not discover any thing of consequence in the stomach and intestines, arising from the opium.

The treatment of these cases certainly forms an interesting and important subject. They do not very often occur, and rarely come within the limits of private practice. The comparative paucity of cases of this kind published cannot have escaped the notice of your numerous readers; and, if any thing herein noticed shall induce them to report those that have occurred to them, whether in favour of early bleeding or against it, much good will arise, and the little time I have taken in framing this imperfect communication will not have been lost.

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* See Med. and Phys. Journal, vol. xix. p. 497.

† Med. Obs. and Inq. vol. vi. p. 331.

Before I conclude, I must admit that much may also be advanced on the other side of this important question, but nothing short of successful cases in illustration of early bleeding can possibly prove its utility, or place it in a less equivocal point of view. Such cases should be well attested before hypotheses, however specious they may appear, should induce us to bleed our patient while labouring under the sedative effects of an immoderate dose of opium.

JOHN C. YEATMAN,
Member of the Royal College of Surgeons.

Bristol, College Green, August 10, 1814.

For the Medical and Physical Journal.

Historical Researches on Pemphigus; by M. SAVARY.

M. GILIBERT, in the excellent Treatise he has given on Pemphigus, has passed very lightly over the history of this disease. The following remarks, which were began before the publication of his work, may possibly have some interest. We have, therefore, thought it adviseable to present them to the public.

The term Pemphigus being derived from the Greek πιμφιξ or πεμφιγξ, it is proper to revert to the writers in that language for its meaning. Hippocrates speaks of a fever called Pemphigodes, but what he has said respecting it is insufficient to characterize it. His expressions are, *οι δε πεμφιγοδης ιδειν δεινοι,** *aliæ pemphigodes aspectu terribiles*— the word πυρετοι, *febris*, is understood.

The long commentaries of Galen on this passage have only rendered it still more obscure. He speaks of variations in the manuscript copies, some containing the two first words only, others with the text as above. He then affixes different significations to the term; sometimes he believes it to indicate an exhalation from the skin of the patient, at others he supposes the febris pemphigodes to be those which are accompanied by pustules. Again, he will have it a pestilential fever analogous to that described by Thucydides, or, taking the word πεμφιξ in a figurative sense, to signify soul or mind. He says the fever is characterised by an affection of the intellectual functions, or delirium. We shall, however, leave all this interpretation, and keep to the definition of this fever, which is to be found in another work ascribed to the same author.† *The febris pemphigodes is that which*

* De Morb. vulg. lib. vii. Fæs.

† Finitiones Medicæ in Isag. Fol. 46.

generates pustules in the mouth, called by the Greeks Phlyctides.

But supposing, what is very possible, that the *febris pemphigodes of Hippocrates* was not the *pemphigus of the moderns*, it is evident the latter was not unknown to the father of medicine, which the following passage from the 2d Book of Epidemics sufficiently proves. "Ichores quidem cuti subnascebantur qui intro concepti calescebant, pruritum que concitabant deinde phlyctænides ambustis pustulis similes, assurgebant quibus sub cutem uri videbantur."

The same passage teaches us what the Greeks understood by Φλυκτενειδες, and consequently by Φλυκτιδες and Φλυκταινα: all these are in fact synonymous terms, and signify little bladders, filled with serosity, like those which arise in consequence of a burn. The most proper place, therefore, to obtain information respecting the disease, is from what the ancients have said of phlyctenæ. Celsus, in speaking of pustules, called Φλυκταινα ελκωδεις, says, with his accustomed brevity, "ubi hæ ruptæ sunt infra quasi exulcerata caro apparet. Fiunt vel a frigore vel ex igni vel ex medicamentis."* Ætius expresses himself more clearly:† "Papulæ quibusdam oriuntur similes his quæ a fervida aqua ambustis emergunt non tamen multum dolorem inducentes. Quibus ruptis subflavi humoris copia paulatim effluit ad biduum aliquando ac triduum durans." The vesicles of pemphigus are here perfectly described, but nothing is said of the fever which commonly accompanies and always precedes them. Ætius adds, that this eruption is more common in women who menstruate irregularly, and in children.

The disease described by Rhases under the name of *Ignis sacer*,‡ seems analogous to the phlyctenæ and pemphigus. He speaks of it as an exanthema, which consists in bladders like those of a burn, and says, that they are commonly preceded by redness and itching, and terminate by ulcers covered with a dark crust. He then adds, that the fever which accompanies this eruption is acute, and insidious in its course. All these symptoms are characteristic of the pemphigus, accompanied with typhus fever.

Fernel,§ who arranges phlyctenæ under erisipelas, gives a description of them very similar to that of Ætius. These are his expressions: "Repente emergunt subflavi humoris copia distentæ, bullarum modo lucidæ atque iis similes quæ

* De re Medica, lib. v. cap. 28.
† Tetrab. iv. serm. 11. cap. 63.
‡ Lib. 27, tract 7, tom. 2.
§ Univers. Med. lib. vii. cap. 4.

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ab aqua fervidâ vel ab igne ambustis erumpunt non manifesto tamen dolore graves his ruptis humor excidit crustulæque obdurescunt dum sanescunt."

Rondelet,* Nicholas Lepois,† Sennertus,‡ Felix Plater,§ and Musitanus,‖ have copied Ætius and Fernelius in what they have said of phlyctenæ. Forestus describes them in the same terms, and relates a particular case, which we shall transcribe, as it appears to be the first upon record. It is entitled "de Phlyctænes in facie cujusdam infantis apparentibus."¶ "A child had transparent vesicles on the face, filled with a yellowish fluid, similar to those which follow a burn produced by boiling water or fire; but they were not attended with much pain. The vesicles broke, and poured out their fluid, after which they were covered with crusts. While healing, I advised the pustules to be anointed first with the juices of plaintain and nightshade, then with a mixture of chalk and vinegar, under the form of a liniment. I washed the face also with a decoction of roses, and prescribed to the nurse cooling diet, with verjuice, and skimmed milk for drink; and in a short time she recovered."

Another case, published at the same time by Schenkius,** deserves also to be mentioned, as it shows that pemphigus was observed before the end of the sixth century. The subject of the observation was the son of this physician. In the space of two days his head, and particularly the face, swelled in an extraordinary manner, and there appeared on the chest, back, and arms, oblong pustules, or rather, says the reporter, transparent vesicles, as though they had been occasioned by the affusion of boiling water, or stinging with nettles, accompanied with itching and redness of the face. After a complicated treatment, which it is not necessary to relate, the disease quickly disappeared—tumor omnis brevi evanuit.

In 1618, Charles Lepois gave a case, in which pemphigus is easily recognised, though the disease is designated hydatides.†† M. Gilibert has referred to it in his work as a complication of pemphigus with putrid fever.‡‡ The same au-

* Method. Curand. Morb. cap. 50.
† De cog proscendio & Curandis morbis, lib. i. cap. 32.
‡ Med. Pract. lib. v. De tumorib. cap. 22.
§ Prac. Med. de superf. corp. dolore, cap. 17.
‖ Trutina Chirurgico-Physica, de humor, cap. 25.
¶ Obs. Chirurg. lib. ii. cap. 8. 1590.
** Obs. Medicæ raræ, lib. v. obs. 124.
†† Select. Obs. & Consil. obs. 149.
‡‡ Monographie du Pemphigus, page 160.

thor thinks,* with Sauvages, that the epidemic disease which prevailed in India in the year 1628, and is described by Bontius,† belongs to pemphigus, or is at least complicated with it; but this appears doubtful, the appearances mentioned by Bontius being insufficient to characterise the eruption. He merely says, that, in the patient whose case he relates, *pustules and vesicles, filled with greenish pus,* appeared, which corroded the skin in the axillæ and groins, upon the neck, back, and loins. Nothing is said of *transparent vesicles and limpid fluid.* Sauvages indeed adds, "Observavit etiam in amphemerina epidemica ab anno 1658 ad 1691. Vesiculas aqueas per collum & pectus sparsas Bontius."‡ But, besides that this description is not to be found in the works of Bontius, this author being dead in 1631, there is in the assertion of Sauvages an evident error. Zacutus Lusitanus is referred to as having observed pemphigus. This physician, it is true, relates a case under the title of Febris pemphigodes, febris ampullosa seu Bullosa;§ but the observation is so lame, that no conclusion whatever could have been drawn from it, if the author had not himself defined the Febris ampullosa, which proves that it is not the true vesicular disease. "I thus call a fever," says he, "in which tubercles appear on the body." A little farther, he says, "that tubercles were by the ancients denominated vibices;" and, in the observation which follows, speaks of pustules. How shall we find pemphigus in tubercles, vibices, and pustules?

We shall be equally deceived if we place to this account the observations collected by Riedlin. One is entitled. *Pemphinx retrocessens animi deliquium causatur;*‖ and the other *Pemphinx or essere.*¶ In the first he is speaking of eminences or protuberances on the surface of the skin, like the bites of purmises, or the stings of cousins; in the second he speaks of pustules whose eruption has been preceded by intolerable itching.

The eruption described by Sydenham in the following passage, has more analogy with pemphigus; but this is merely accidental or symptomatic: "Pustularium per universum fere corpus eruptio, quæ urticarum puncturas referunt & nonnunquam in vesiculas attolluntur."**

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* Monographie du Pemphigus, p. 173.

† De Medicina Indorum Obs. Select.

‡ Nosol. Method. tom. i. p. 432. Edit. Amst. 1768, in 4to.

§ Prax. Med. Adm. lib. iii. obs. 15.

‖ Obs. Med. cent. i. obs. 23. ¶ Ibid. cent. iii. obs. 48.

** Obs. Med. circa morb. acut. sect. vi. cap. 6. de Febris erysipelatosa.

Morton

Morton also includes this eruption with those which appear in malignant fevers.

A singular fact is related by Simon Schulz,* which we really think belongs to pemphigus. A woman, thirty-eight years of age, regularly, for some days previous to the menstrual discharge, suffered from vertigo and pain in the head, which was soon followed by the eruption of a vesicle behind each ear. These vesicles ruptured spontaneously, pouring out a humour of a yellowish colour; and immediately after the menses appeared. This observation was communicated to the society *Naturæ Curiosorum* in 1676. In the year following, Christopher Seliger presented his case,† which M. Gilibert places with his first species. The same collection contains many others, of which we shall speak hereafter. In 1691, Paul Spindler gave a case in which it is easy to discover the character of pemphigus.‡ "A young person, after cold chills, succeeded by heat, had upon the abdomen an eruption of vesicles, preceded by an appearance of flea-bites. These vesicles were filled with serum, and occasioned a lancinating pain. The appetite was lost; the pulse was stronger, and more frequent than natural; the urine high-coloured." The author observed the same complaint in several individuals that year. Hoffman considers this case to be analogous to one which he published.§ Other facts relating to pemphigus are mentioned by the latter in the Consultat et respons, cap. 128.‖

The following observation by Lamotte presents to us a case of erisipelas complicated with pemphigus. It is, in point of date, much anterior to those furnished by Delabrousse.

"In March, 1698, a magistrate of our town was suddenly attacked with cold chills, which continued upwards of two hours, and were followed by violent fever, and a distressing itching in the face, with heat in the eyes, and a continual flow of tears. When the fever was a little diminished, I bled him. His face after this became swoln and red, the bleeding was repeated, a glyster administered, and linen moistened with brandy was applied to the part. During the night the face became covered with phlyctenæ, and on the following day I found him apparently as if boiling water had been poured upon him. The brandy having produced much

* Eph. Nat. Cur. dec. i. ann. vi. et vii. obs. 233.

† Ibid. dec. i. ann. viii. obs. 56.

‡ Obs. Med. Franc. 1691, in 4to. obs. 92.

§ De affectu raro Scorbutico.

‖ Also in Med. Ration. part v. cap. 5; under the title of *Affectus pustularis pruriginosus.*

pain,

pain, I was obliged to remove it, and substitute in its place soft cream, which I applied as a liniment to the face, ears, and that part of the throat, which was occupied by the disease, the patient soon recovered."*

Following a chronological order, we ought to speak here of the treatise of J. J. Fiek, on the vesicular fever caused by the retention of the lochia;† but we know nothing of this book except the title; and perhaps this pretended vesicular fever is nothing but the miliary fever of child-bed women. After this came the observations of Delius,‡ Furztenau,§ Freutzel,‖ the descriptions of Thierry,¶ and of Langhans,** from which Sauvages has established several species. This author distinguishes, in fact, five species of pemphigus.†† The first he calls Pemphigus Major, from the observations of Seliger, Lepois, and Delius. The second, Pemphigus Castrensis; it is that which Thierry has rather pointed out than described. The third, described by Langhans, the Pemphigus Helveticus. The fourth, Pemphigus Indicus, from Bontius and Morton. Lastly, he makes a species of the vesicular eruption of Bougeant, and he denominates it Pemphigus Brasiliensis.‡‡

Linnæus, whose classification of diseases is of the same date as that of Sauvages, only speaks of the Symptomatic Pemphigus, under the name of *Morta*. Vogel calls it Febris Bullosæ,§§ but never saw it. Macbride, who never met with it in his practice, calls it Febris Vesicatoria; but he describes this fever as having some analogy with the plague, and the Chronic Pemphigus is ranged under the class Cachexiæ; nevertheless, these two eruptions, as Mr. Gilibert has proved, do not differ essentially. The distinction made by Daniel,‖‖ between the external or Common Pemphigus, and the internal or Helvetick Pemphigus, is equally unfounded. Sagar

* Traité complet de Chirurgiæ.

† De Febre vesciculari ab abstractione Lochionum, Jena, 1726, in 4to.

‡ Amænit. Med. Dec. v. cap. ix. Febris Vesicular.

§ Act. Nat. Cur. tom. ix. Obs. 18. Febris Acuta Vesiculoso Erisipelacea.

‖ Ibíd. tom. x. p. 260. De peculiari quadam febris malignæ. Catarrhalis exanthematicæ, purpuraceo pustularis specie, vesicali ulcerosa.

¶ Med. Experim. part i. chap. v. sect. 3.

** Act. Helvet. tom. ii. p. 260. Brevis delineatio morbi qui anno 1752, in Valle Simmia epidemice grassatus est.

†† Nosolog. Method. 1768, tom. i. p. 430, 4to.

‡‡ Observ. sur la Physique, tom. i.

§§ De Cognoscendis & Curandis morbis.

‖‖ Syst. Ægritud. Lips. 1781, in 8vo. p. 147.

has

has added to the species of Sauvages the Pemphigus Apyreticus;* whilst Plenck† has reduced them to four. Cullen contented himself with enumerating the species of Sauvages, with doubts respecting the existence of the disease, which at that time he had not seen, though Dr. Home afterwards pointed it out to him.

Among the particular observations, we ought not to pass by a well-established fact related by Van Swieten.‡ A man, 50 years of age, of a good constitution, in the habit of taking largely of wine, began, on the 27th of July, to experience pain in the back, and gradually, without any febrile affection, this part, for the breadth of three inches, was covered with little pustules depressed in the centre, containing a yellowish humour; they became confluent in many places, and on the first of the ensuing month the subjacent parts appeared black; the urine was red, voided in small quantity, with a white sediment; the appetite was lost, without much thirst; the tongue was clean, with no bad taste in the mouth. On the 16th of the month he was quite cured.

Another distinguished practitioner, Rougnon, of Montpellier, saw it reign epidemically at a time when bilious complaints were prevalent.§ M. Sourtelle also observed it at Besançon at the same time.‖ Finke met with a very remarkable instance in an epidemic bilious fever.¶ Dickson,** and after him Miroglio,†† have seen the disease in all its simplicity; and Salabert, in a constitution eminently bilious, has seen the vesicular eruption manifest itself in a critical manner.‡‡ Burghard had before related an instance of the same kind.§§ Lastly, Blagden has related two cases which deserve particular attention, inasmuch as they seem to indicate a contagious property in the disease not allowed by others.‖‖

"I was called," says Blagden, "in January, 1790, to see a little girl; she had fever; I gave an emetic; the following day the fever was stronger, and she had delirium; a blister was applied between the shoulders, and the bowels were opened by an emollient injection. In the evening pustules

* Syst. Morb. Sympt.

† Doct. de Morb. Cutan. Cl. iv. gen. 3. Pemphigus.

‡ Constit. Epidem. published by Stoll, after his death. Stoll, tom. i. p. 125.

§ Considerat. Pathologicæ Semeioticæ, fasc. i. p. 231.

‖ Elemens de Med. tom. ii. p. 126.

¶ De Morbis Bilios. anom. p. 118.

** Journale de Med. tom. 80, p. 178.

†† Ibid. tom. 81, p. 273. ‡‡ Ibid. tom. 82, p. 72.

§§ Nov. Act. Nat. sur tom. iii. p. 328, Obs. 72.

‖‖ Medical Facts, tom. i. p. 105.

appeared,

appeared, first on the chest, and afterwards on the hairy scalp; and other parts of the body, in three days; they filled with a yellowish fluid, and had the appearance of little bladders; the greater part were of the size of an almond, but those of the forehead and chest were as large as a walnut; the largest were opened, the others suffered to break of themselves. Cerate was used for dressing the vesicles of the limbs, and those of the head were cured in about ten days, but those of the chest were exquisitely painful, and lasted two months; some on the forehead left marks behind, which were never afterwards effaced; small vesicles were observed in the mouth, and the child shewed great reluctance in swallowing, as the fever and delirium disappeared immediately after the eruption; the disease was trusted to nature, no pustule remained after the fourth day."

Five days after the appearance of this eruption on the first child, another, three months and a half old, belonging to the same parents, was seized with fever, and in the course of the three following days had an eruption exactly similar, except that the vesicles did not exceed the size of a pea. They ruptured spontaneously, and the little wounds cicatrized in the space of a week. This child required no medicine.

Wichman made this disease the subject of a particular dissertation,* where he relates several cases of Chronic Pemphigus. J. P. Franck gave an extensive article of it in his Epitome.† Reil speaks of it at length.‡ Burserius describes it very well.§ It has been also described by Willan,‖ Thomas,¶ Darwin,** Pinel,†† and M. Swediaur.‡‡ We pass by the recent observations published in the different journals of medicine, because they are all found, and for the most part analysed in Mr. Gilibert's work. But there are three dissertations with which he appears to be unacquainted: the first is that of Mr. Charles Bobba;§§ the second, by Mr. Eckhout;‖‖ the last, by M. Bunel.¶¶ The memoir of M. Robert may be ranged with these.***

* Beytrag zur kentniss Pemphigus, Erf. 1790, in 4to. de 16 page.
† De Curand. Homin. Morb. tom. ii. p. 363.
‡ Memorab. Clin. Fasc. II. sect. vi. p. 145.
§ Instit. Med. Pract. tom. ii. p. 92.
‖ On Cutaneous Diseases.
¶ Practice of Physic. ** Zoonomia, tom. iii. p. 404.
†† Nosograph. Philosoph. tom. ii. p. 91, 3d edit.
‡‡ Nov. Med. rat. systema. tom. i. p. 166.
§§ Memoire sur le Pemphigus ou exantheme vesiculare. Stuttg. 1802, in 8vo.
‖‖ De Pemphigo. Groning. 1810, in 8vo. Diss. Inaug.
¶¶ Essai sur le Pemphigus. Paris, 1811, in 4to. Diss. Inaug.
*** Journ. de Med. continué, tom. xxiv. p. 3, 107, 219, et 327.

For the Medical and Physical Journal.

On the Cow-Pox; by Mr. RICHARD WALKER, of Oxford.

(Continued from p. 216.)

AUGUST 2d.—I have just seen the observations of Mr. Rigby, a surgeon at Norwich, in the Medical Journal of this month, in which, in a concise and satisfactory manner, he removes a suggested difficulty or two respecting the propriety or necessity of using two punctures, &c. in vaccination. I am truly astonished at the various doubts and differences in opinion which have been occasionally started upon this subject, after the publication of the original facts by Dr. Jenner. Surely such persons must have been but little acquainted with the phenomena of inoculated small-pox, and the anomalous circumstances which sometimes, though rarely, occur in it. For my own part, I am thoroughly convinced that one puncture, according to the manner I have described above, is always sufficient. A multiplicity of punctures, indeed, may increase the chances of success in an ignorant or careless inoculator. Another difficulty, likewise, respecting the interference of the same modes in the proper progress of the disease, is equally ill-founded, and judiciously removed by the same gentleman.

Had I been the fortunate discoverer of vaccination, I should have been in great danger of losing the pecuniary reward it obtained, since, probably, I should have contented myself with barely stating the facts respecting it, as it appeared to me at the time of the discovery; and most probably, by the time the arbiters themselves had been satisfied respecting such facts, I should have stood in no need of it.

A correct decision, however, respecting the propriety of vaccine inoculation, is of such immense importance to the community, that however clear and unobjectionable it may have appeared to a great portion of the faculty, yet whilst another portion of the faculty, equally respectable, are throwing out apparent difficulties in the way of it, it can be no matter of surprise that so much caution and reserve has been adopted by those whose province it has been to decide between them.

The following brief statement of the ordinary progress of inoculated small-pox, which I drew up for my own use, some years ago, may not perhaps be unacceptable to others.

OBSERVATIONS.—*First.* From or on the 3d to 5th day inclusively, signs of infection having taken place.

Second. From 6th to 8th day inclusively, begin to sicken.

Third. From 7th to 9th, pustule in arm, fit to inoculate from; and sometimes so early as 6th day, and sometimes remains fit till 14th, or 19th, of longer.

Fourth. From 8th to 10th day, eruptions begin to appear.

Fifth. From 10th to 12th day, illness ceases.

Sixth. From 11th to 13th day, inflammation of arm at height.

Seventh. From 12th to 14th day, pustule from inoculation turned brown, but sometimes not till some days after.

Eighth. From 14th to 16th day, eruptions in face become ripe or maturated, and progressively so afterwards in other parts.

Ninth. By the 15th, or a few days after, the dried pustule in the arm begins to separate or loosen.

Tenth. By the 17th or 18th day, eruptions all turned; physicking may commence.

Eleventh. By the 24th or 25th day, physicking over, and fit to go airing a short time, previously to returning home.

N. B. In the estimation of days, the day of inoculation is included.

The above summary of the progress of inoculated small-pox was drawn up before the introduction of vaccination, and may still be useful or interesting.

Cow-pox.—The rules laid down for inoculated small-pox, may serve likewise for inoculated cow-pox; observing that, in general, the progress of this is commonly earlier by one day than that of the former, and the illness much slighter, scarcely claiming notice, and of shorter duration, and no eruption ordinarily; hence its termination is earlier, viz. by the 14th or 15th day usually.

On the 8th day, inclusively, from the time of inoculation, the pustule is sufficiently advanced to inoculate from ordinarily, and sometimes a day or two earlier.

The preparation for inoculated small-pox may commence from the time of inserting the variolous matter, by keeping the patients to a due regimen, giving three purgatives, viz. three doses of pulv. scammon. and calomel, between the time of inserting the matter and the time of sickening.

Vaccination requires no preparation either by regimen or medicine; and moreover is not liable to be taken by one person from another, as inoculated small-pox is.

The appearance and progress of the inoculated part in cow-pox is so like that in inoculated small-pox, although different in certain minute circumstances, clearly discernible to an accurate observer,* and so unlike any thing else we have ever seen in practice, as I should think must at

* The chief or characteristic difference between the pustule of the cow-pox and the small-pox is, that the fluid of the former changes at once from a serous state to dryness.

once impress every person, conversant in small-pox inoculation, with the close analogy, if not the identity, of one disease to the other; and consequently lead them to a very strong presumption, *à priori*, that vaccination might prove a safe substitute for it, or, in other words, a permanent preventive of small-pox, although such person were unacquainted with any previously-established fact respecting the security derived from cow-pox.

With respect to the opinion that certain diseases, as measles, chicken-pox, &c. coming subsequently to vaccination, may produce such a change in the system, as to render the person (unlike what happens in inoculated small-pox) susceptible of taking the small-pox; I can only say, that neither my experience nor reason accords with such a notion.

It has been said that noxious humours have been occasionally received into the habit, together with vaccine matter, producing noisome eruptions, &c. Such may adventitiously have happened; but nothing of this kind can be reasonably apprehended in transferring this matter, any more than in the instance of small-pox matter from one human subject to another.

Moreover, provided there be already some latent disease in the habit of the person inoculated, as scrophula, scurvy, ordinarily so called, &c. there is less danger of such disease being roused into action by vaccination, than by small-pox; and I presume it to be a universally admitted fact by the faculty, although supposed otherwise by ordinary persons, that neither scrophula nor scurvy can be communicated from one person to another by inoculation. In short, the only difficulty that ever presented itself to me respecting cow-pox, with regard to practice, was to distinguish between a pustule purely local in the part inoculated, in which the matter might not have been absorbed into the system, and the perfect one, in which the constitution had been affected; and, likewise, whether such local affection, insufficient to secure this patient from subsequent small-pox, be yet capable of communicating the cow-pox completely to a second person: that both these circumstances may happen, I have no doubt; but prudence dictates, that in the first instance the person be vaccinated afresh; and in the second, that matter under such dubious circumstances be not used. Each of these circumstances, we well know, may happen in inoculated small-pox;* and I am of opinion, that such a perplexing

* The matter of cow-pox being apparently of a milder or less virulent nature than that of small-pox.

circumstance is most securely obviated by attention to the mode of inoculation I have prescribed above, by which method the matter is not only perfectly inserted, but the part likewise excited to absorption.

We have had a few failures in Oxford, that is, attacks of small-pox after vaccination, particularly at the commencement of the practice; but probably they are all assignable to the causes above-mentioned; no such instance of failure has happened in my own practice; the circumstance of a local pustule is more likely to happen in the former than in the latter disease.

Much stress is laid, and very properly, on the circumstance that cow-pox is not contagious. Is inoculated small-pox contagious, when, as is sometimes though very rarely the case, it is free from eruptions, the disease venting itself by the pustule only at the inoculated part? Two cases of which I have mentioned here, and could enumerate an instance or two I have witnessed of the same kind, in all of which there was no subsequent small-pox.

With regard to any supposed dereliction or degeneracy in the matter or essence of cow-pox, in consequence of repeatedly passing through the human system, or imparting its specific efficacy to it, which might in time render it less active, and in the end inert, unless occasionally renovated from its original source, facts have not in the least induced me to give way to such an opinion, having lately vaccinated persons in whom the affection went on as actively and as satisfactorily as at the first introduction of the practice, although such affection had probably been propagated through an almost endless variety of persons without such renovation. I am therefore inclined to attribute the occasional variation in the apparent activity of the vaccinating matter, as in the variolous matter, not to any defect in the vaccinating matter itself, but to the peculiar idiosyncrasy of different habits, together with other adventitious circumstances. Moreover, if my *rationale* originally stated be true, viz. that the matter or essence of the vaccine disease possesses the power, or acts in assimilating to its own nature a certain portion of the fluids circulating in the system, and which in the end it expels, it must necessarily follow, that the essence or matter of this disease, as in the instance of small-pox, is unalterable in its specific nature, by passing over so repeatedly through the human system. It is not improbable, however, but that the matter, as taken from the cow, may, in being naturalized as it were to the human system, undergo a peculiar change or amelioration, which, when completed, it is no further susceptible

tible of change or alteration, still retaining, nevertheless, its antivariolous efficacy as unimpaired as ever.

On Specific Remedies.

Nothing can be more pleasant or interesting to a novice in the profession of physic, than reading over the medical uses of a modern Herbal: every plant has its specific medical virtues, and every disease has its remedy. What a pity it is that progressive experience compels a practitioner to know otherwise, and, in the end, deprives him of a very great portion indeed of this faith! The Family Herbal of Dr. Thornton, incomparably superior to any work of the kind, unquestionably, which has preceded it, and far above the reach of my encomium or criticism, in other respects is, generally speaking, far too liberal or unguarded in its medical descriptions. It is proper that, in such a work, every plant should be retained that has any just claim to efficacy or utility, and such effects noticed; but, when we are told that certain plants which hold a subordinate place only in our present Pharmacopœias, and others which probably never had a place in any Pharmacopœia, possess specific virtues in curing the most formidable diseases, as horehound in consumption, misletoe in epilepsy,* &c. &c. it is

* Epilepsy occasionally ceases spontaneously, and thus has it happened that such a variety of medicines have obtained the credit of curing it.

Amidst an immense number of cases of epilepsy, which have presented to my observation, I have never been able to discover that any one of these medicines, or remedies, so called, exhibited any specific effect upon the disease. How a practitioner may be deceived in this respect, I shall show by the following fact. A boy became a patient of the Radcliffe Infirmary for this complaint, for which he took the nitrate of silver, at that time a newly-proposed remedy. In about a month, the fits, which had occurred frequently before, ceased; after continuing the medicine about a fortnight or three weeks longer, and remaining free from the fits, he was directed by his physician to be discharged cured. I requested, however, that the boy, who lived at a distance, might be retained for a time. In a week or two, the fits returned in like manner as before;—the medicine, which had all along been persisted in, was continued, and increased in quantity, for a due time, without any beneficial effect, and he was discharged. Had this boy been discharged before, we should probably have heard no more of him, and it would have been in vain for me, had I been disposed to have attempted it, to have persuaded any one that he was not cured by the medicine.

Upon

is probable ignorant persons may be misled, and the injury to themselves, in consequence, very serious.

It is true, this gentleman produces authorities for what he mentions, and very frequently the language itself of the authors; but very many of these instances of cures said to have been performed, positively, in this work, have long since been justly discredited by every practitioner of experience, and ought to be consigned to oblivion.* If what is asserted in this and other books of the kind be true, why tolleth the knell so frequently for persons arrested in the mid-day of life by a fatal disease? It is the frequent repetition of disappointment respecting medical facts, (so called,) I presume, which has reduced this gentleman to his present state of professional scepticism.

Oxford. RICHARD WALKER.

Upon interrogating the boy afterwards, I learned that he had had similar interruptions to his fits before, whilst taking no medicine.

It requires a much greater degree of experience than ordinarily falls to the lot of an individual practitioner, to determine the effect due to a medicine alone, exclusively of what is attributable to nature, regimen, &c. in certain diseases. This can be ascertained only by a sufficient number of facts on one side of the question or the other, as completely to remove all doubt; such, I take it, I have experienced.

I have witnessed the exhibition of very long-persevering trials, in a great number of instances, of the various medicines proposed as remedies in this disease, and no doubt they have each an equal claim to the title.

Should, however, the fits cease or abate during the use of any medicine, this certainly is an encouragement to administer it again in similar cases, provided it be of an innocent nature, but this is certainly not the case with nitrate of silver.

Epilepsy, arising from or depending upon causes which are removeable, as worms, injuries to the head, suppressed humours, certain mental affections, &c. ceases of course when those causes are removed.

* Should it be questioned how any person can be deceived in a plain matter of fact, as it might be called, I shall answer, and I well know with truth, that in such instances of cure, the nature of the complaint has been misunderstood; and this, as I likewise well know, may happen to a person of reputed eminence in his profession. I occasionally hear, or read, of cancers being cured by a specific remedy or application, that is, without excision or destruction by caustic: I may not doubt that a cure has been effected; but my own ample experience in such cases, together with my communication with other experienced persons of the faculty, compel me to disbelieve that such case was cancer.

For

For the Medical and Physical Journal.

Refutation of Dr. Hale's Opinions on Animal Heat; by Mr. B. C. Brodie.

IN the last Number of your Journal, I see an account of an Inaugural Dissertation, by Dr. Hale, junior, in which the author states, that, having repeated some of my experiments on animal heat, he had met with very different results. This occasioned in me some surprise, as I had reason to believe that I had conducted my experiments with all that caution and attention to minute circumstances, which every physiologist knows to be absolutely necessary in such investigations, to enable us to arrive at any accurate conclusions. On perusing the article in question, however, I found that Dr. Hale in reality had not repeated my experiments, but had made others, bearing only a certain degree of analogy to them. The grounds of this assertion are, 1, that the whole of my comparative experiments were made on rabbits, and his appear to have been made on dogs; 2, that in Dr. Hale's experiments the brain was left undisturbed, except by the division of the spinal marrow, whereas, in mine, either the brain was removed, or its functions were completely suspended by means of the Woorara poison; 3, that Dr. Hale omitted to make the chemical examination of the respired air.

1. In all my comparative experiments, I was led to employ rabbits in preference to other animals, because it was more easy to procure them exactly of the same age, size, and colour (circumstances of great consequence to be attended to); and because in my second series of experiments they were of a convenient size for being included in the apparatus constructed for the examination of the respired air. When in a rabbit the circulation is maintained by means of artificial respiration after decapitation, the animal lies motionless, and exhibiting no signs of sensibility; whereas a dog under these circumstances is affected with violent convulsions, has repeated evacuations of fæces, and even seems to perform certain voluntary movements. It is not unreasonable to suppose, that, if in a dog the other animal functions continue to be performed in so great a degree, from the influence of the spinal marrow, after the brain is removed, from the same cause the faculty of generating heat should continue to exist in a slight degree also.

2. Dr. Hale, in simply dividing the spinal marrow, left an extensive nervous communication between the brain and the trunk, by means of the nerves situated in the neck. In two of his experiments, indeed, he states, that these nerves were divided; by which I conclude, that he made a section of the sympathetic nerves, and of those of the eighth pair, in the middle

middle of the neck, since no others are accessible to an operation, nor these except in this situation. Even this, however, cannot be regarded as having been sufficient to interrupt the nervous communication between the brain and the rest of the system, since the nerves of the face, tongue, &c. and the anastomosing branches of the sympathetic, spinal, and other nerves in the upper part of the neck, were still entire, and capable of conveying the cerebral influence directly to some parts, and indirectly to other parts, of the body.

3. Dr. Hale, in neglecting to examine the respired air, omitted a very important part of the investigation. Had he found, as I did, that the animals in which the artificial breathing was employed consumed as much oxygen, and evolved as much carbonic acid, as under ordinary circumstances, he would have regarded his experiments as equally conclusive with mine against the chemical theory of animal heat.

Indeed this part of physiology still presents an ample field of inquiry. On the subject of animal heat we possess at present some negative, but very little positive, knowledge. The experiments of Dr. Hale are not without value; and I trust that he will continue to prosecute his researches. He will also, I am sure, excuse me if I take the liberty of suggesting, that, in the repetition of experiments made by others, too much attention cannot be paid to making them alike, even in the most minute particulars, as physiological science is not yet sufficiently advanced to enable us to pronounce with certainty what circumstances are, and what are not, of importance.

B. C. BRODIE.

Sept. 4, 1814.

For the Medical and Physical Journal.

Notice respecting Dr. Schultzenheim; by Mr. J. C. WACHSEL.

IN the Note on the Report of Vaccination in Sweden, page 250 in your last Number, Dr. Schultzenheim is described as appointed in the year 1754, by the States of the Kingdom, to inquire into Sutton's and Dimsdale's mode of inoculation in England. In justice to Dr. Archer and these Hospitals, it is, that I acquaint you, Dr. Schultzenheim was for twelve months a pupil of Dr. Archer's, and so diligent in the attendance on the practice of these Hospitals, that he afterwards published a very correct account of that institution. His work was printed for A. Linde, in Catherine-street in the Strand, in the year 1758.

JOHN CHRISTIAN WACHSEL,

Resident Apothecary, &c. &c. at the Hospitals for the Small-pox,
Sept. 14, 1814. *for Inoculation and for Vaccination, at Pancras.*

For

For the Medical and Physical Journal.

Observations on the Surgery of the Ancients, vindicating their Claims to many of the reputed Discoveries and Improvements of modern Times. By DAVID HOSACK, M.D. Professor of the Theory and Practice of Physic and Clinical Medicine in the University of the State of New-York, Member of the American Philosophical Society, of the New-York Historical Society, &c.

(*Concluded from p.* 119.)

THE practice of Celsus is, at present, pursued, under similar circumstances, by that celebrated surgeon, Mr. Abernethy, of St. Bartholomew's hospital; who has, in numerous cases, dispensed with the trephine, having relieved his patient by the application of other remedies. But, if the symptoms became more formidable, and the patient experienced no benefit from the first operation, Celsus then directed such portions of the bone to be removed, as the extent of the injury appeared to require. In those cases where the fracture or depression was small, he employed the instrument called the *modiolus;* which, in its construction, is similar to the trephine. But when the fracture was extensive, or of an irregular shape, he made use of a perforator, so as to surround the part affected with holes; and afterwards employed the chisel and mallet to cut out the portion of bone inclosed within them. In this operation, large portions were removed, which the modiolus could not cover, unless frequently applied. Mr. Hey, of Leeds, has lately introduced a substitute for the trephine; by which the same advantages are obtained as by the perforator and chisel of Celsus.

As anatomy in those days was very imperfectly understood, we cannot be surprised that Celsus was less successful in some of the more complicated operations of surgery. Accordingly, in reducing strangulated hernia, he experienced great embarrassment: but it is to be recollected, that this operation requires an accurate knowledge of the structure of the parts concerned, to guide the knife of the operator. This knowledge has only been acquired within a few years. In the hands of John and Charles Bell, Mr. Astley Cooper, of London, and Mr. Hey, of Leeds, this operation has received its best and most important improvements. But in the history given by Celsus, of the symptoms and causes of hernia, and of the nature of its contents, he is no less perspicuous than upon most other subjects that came under his notice. He describes, with great accuracy, most of the species of hernia now found in books of surgery, except such as occur under

Poupart's ligament, and that which takes place between the abdominal muscles. The umbilical hernia he distinguishes into the omental and intestinal, according as the omentum or intestine is contained in the hernial sac. In like manner he describes the scrotal hernia, as containing omentum, intestine, or both combined, with the symptoms which characterize each species.

He also distinguishes scrotal rupture, as it occurs in the young child and in the adult. In the former, he directs a compress to be applied to the part, and retained by means of a roller; by which application, he observes, the intestine is oftentimes forced in, and the coats agglutinated: but in the adult, when the intestine is protruded in a large quantity, and attended with symptoms of danger, it appears that he was unacquainted with the mode of replacing it within the abdomen. He observes, it can only be reduced as far as the groin; thereby producing a change, but not a termination of the disease: and in those cases where he considered an operation necessary, he did not restore the displaced intestine, but by means of a ligature or the knife he diminished the quantity of loose skin, and by the inflammation and thickening of the parts induced, formed a cicatrix, which was calculated to prevent an increase of the prolapsus. Upon the same principle, in umbilical hernia, when the parts protruded were restored to their natural situation, he excited inflammation by ligature and caustics; which so changed the structure of the parts, as to prevent a return of the rupture. Thus far his operation was successful; but in some instances, from want of anatomical knowledge, he considered it necessary to remove parts which have no connection with the disease. In hernia of the intestine, he sometimes removed not only a portion of the hernial sac, but also extirpated the testicle itself.

In hernia of the omentum, if small, he replaced it by the hand alone; and to prevent it from being again protruded, he applied a compress to the part, and secured it by a bandage passed round the loins; but if large, he did not attempt to reduce it. He then, to effect a separation of the mortified parts, made use of escharotics or ligatures, preferring them to the scissors or knife, on account of the hemorrhage which attends the use of cutting instruments. The same observation is made, and a similar practice adopted by Mr. Hey, of Leeds.

Celsus also performed many other operations in diseases of the abdomen and pelvis, including the organs of generation. In wounds of the intestines, he performed the operation of gastroraphy; and his description of the mode of performing

forming it, corresponds with the directions given by the best writers of the present time. In the treatment of dropsy, he performed the operation of tapping, not only on the side of the belly, but, in some instances, he perforated the navel; which is considered, at this day, as the latest improvement in the manner of performing paracentesis. The hydrocele, circocele, and the inflammation of the testicle, are also well characterised by this accurate observer. He cured hydrocele by incision. The varix of the spermatic cord, as well as the varices of the veins of the legs, he cured by laying bare the vein thus enlarged, and by applying the actual cautery; or removed it by excision, having previously separated the vein, and inclosed it with ligatures, above and below the part to be removed. He divided the prepuce in phymosis; he introduced the catheter in retention of urine, both in males and females. Celsus also performed the important operation of lithotomy; but considered it as attended with great danger. He very judiciously prepared his patient for this, as for every other capital operation, by abstinence from solid food and stimulating drinks. His mode of operating was, in some respects, peculiar to himself, and was hence denominated *lithotomia Celsiana;* but, in most circumstances, it agreed with that afterwards adopted by Paulus Ægineta, and others, by the apparatus minor, or cutting on the gripe. When the operation was finished, he bled his patient, enjoined abstinence, made use of a warm bath, and oily fomentations, to diminish inflammation: but he advised the operation to be performed only in the spring of the year, and confined it to patients between nine and fourteen years of age.

These facts teach us, that Celsus was not sufficiently acquainted with anatomy to perform this operation, without great hazard to the patient. At this we cannot be surprised, when we recollect that it is only within a few years that it has been performed with general success. Our only surprise should be, that the art of surgery was so well understood as it appears to have been in his day. Among other operations, he extracted the dead fœtus from the womb, by means of the crotchet; and, when difficulty presented, he divided the child, and removed it piece-meal. To restrain hemorrhage, or to remove any inflammation induced by the operation, he applied soft cloths, wet with an infusion of vinegar and roses. Condylomata (or tubercles of the anus) and hemorrhoidal tumours, he removed with the knife and ligatures. The same treatment you will find adopted and recommended by Mr. Ware, in his valuable essay on that subject; but which contains no reference to the practice of Celsus. Fistula in ano he also cured by ligature,

making use of a linen thread instead of the leaden wire employed by the moderns. This mode of treating fistula was revived by Foubert, and has been frequently practised in France since that time. Professor Camper has also made use of ligatures, in those whom he found fearful of the knife, or when the patient could not submit to the necessary confinement which the incision requires. But the great inconvenience which arises from the long-continued irritation of the ligature, and the prolapsus ani which it sometimes produces, have occasioned it to be laid aside.

Celsus was no less successful in the treatment of fractures and dislocations. His directions for reducing the fracture of the clavicle, and his treatment of fracture of the ribs, correspond with those contained in the present systems of surgery; and in fractures of the extremities, although he did not employ the many-tailed bandage, or place the broken limb in a flexed position, but confined it to the fracture-box, he remarks, that the smaller bones were generally united between fourteen and twenty-one days; those of the leg and fore-arm, between twenty and thirty; and those of the arm and thigh-bone, between twenty-seven and forty days. Few surgeons of the present time, I believe, can boast of greater success.

An eminent modern physician emphatically exhorts every person in the study of medicine to keep Celsus in his hands by night and by day. I trust the outlines I have exhibited of his practice of surgery, and the evidences I have adduced of his skill in that art, will also induce the pupil in *surgery* to give his writings an attentive perusal.

Galen, the physician of the Emperor Marcus Aurelius, also holds a distinguished place in the history of surgery. He was born at Pergamus, a city of Asia, about 130 years after Christ, and during the reign of the Emperor Adrian. He was celebrated not only as a practitioner in physic and surgery, but as the most accurate anatomist that had then appeared. His knowledge of anatomy, at the same time that it furnished him with more correct views of the functions of the human body, and of the general principles of surgery, also enabled him to perform some operations unknown to his predecessors. By some who profess to give an account of his works, he is considered as the mere commentator on the writings of Hippocrates, especially upon those subjects which relate to surgery. But although Galen selected every thing he considered valuable in the works of those who had gone before him, he has left the evidence of great original genius, not only as a physician, but as a practitioner of surgery. I may remark, that his writings, like

like those of Celsus, have been plundered by the moderns, without the least acknowledgment of the source whence they derived the materials of what they afterwards denominated discoveries and improvements.

Without going into a detail of the practice of Galen, I shall confine my remarks to a few of those subjects in which he appears to have added to the stock of knowledge he had received from his predecessors.

In his chapter on ulcers, he distinguishes their several species with so much correctness, that it has evidently been the basis of Mr. Benjamin Bell's treatise upon this subject. Not only the names by which they were designated by Galen are retained, but even his definition of an ulcer has been adopted by our late systematic. "A solution of continuity, in any of the softer parts of the body," is the definition of an ulcer given by Mr. Bell. "Unitatis solutio est in carnosa parte," is the language of Galen. I may also add, that, in the treatment of ulcers, there is scarcely what is called an improvement in the practice of the moderns that was not known to Galen. During the inflammatory stage of phlegmon, he carefully enjoined his patient to abstain from wine and stimulants generally. He also made use of the lancet, purgatives, and warm bathing, to diminish the inflammation; but, when the ulcer was formed, and a free discharge of matter obtained, he directs his remedies according to the character of the wound. In the simple purulent ulcer, his practice was to bring the edges as nearly as possible into contact. In the sordid ulcer, he made use of honey, verdigris, and terebinthinate applications, to change its condition, and to promote the growth of healthy parts. Oily dressings, and relaxing cataplasms, he very properly proscribed, as injurious in those cases. With the same view of restoring a healthy action in the part, he directs it to be washed with wine; and, as an evidence that he had in view its stimulant qualities, he observes, that the Falernian, which was a sweet wine, was useless in this respect. "Nam quecunque dulcia pariter et fulva sunt, ut Falernum, ad id inutilia existunt."

But one of the most approved modes of treating ulcers, in the present day, is by bandage. This also was the practice of Galen; and in his direction upon the application of the roller, he observes, it should not be so loose as to give no support to the limb, nor bound so tight as to excite pain by its pressure. "Circumductio etiam ipsa non ita laxa sit ut nihil efficiat nec ita vehemens ut dolorem premendo excitet." In punctures of the nerves, the practice of Galen was also original. If the wound be large, he advises it to be kept

kept open; but, if small, he directs it to be dilated, and terebinthinate and other stimulating dressings to be applied, for the purpose of obtaining a free discharge from the surface of the wound. "Ubi aliquis nervus est punctus, cutem ipsam servari oportet, aut quod tutius est latius incidere." In warm climates, the same practice is successfully pursued under similar circumstances, in the present day.

For the purpose of suppressing hemorrhage, when the external application of cold water and astringents failed, such as unripe galls, balaustines, and the stronger austere wines, it was the practice of Galen to raise the bleeding vessel, by means of a hook, and to secure it by a vinculum or ligature. Ambrose Paré, in the sixteenth century, therefore unjustly claimed the use of the ligature as his discovery.

The aneurismal tumour is also well characterized in the writings of this celebrated surgeon. From some expressions contained in his work, I am also induced to believe, that in the treatment of fractures he placed the broken limb in a flexed position. It was certainly his practice, when the bones were secured by bandage, to place the limb in that situation which occasioned the least pain to his patient; and in the application of the bandage, he was aware of the inconvenience and injury arising from too severe pressure upon the part affected. To aid the generation of bony matter, in forming a callus, he also, as in wounds of the soft parts, made use of wines and other stimulating applications.

Two other writers of respectability among the ancients merit our attention, Ætius and Paulus Ægineta. I pass over the works of Oribasius, as they contain nothing important, but what is to be found in the writings of Galen.

Ætius flourished at the end of the fifth and beginning of the sixth century. He was born at Amida, in Mesopotamia, and was educated at the celebrated medical school of Alexandria. Although his works are not so well digested or arranged as those of Paulus, his chirurgical writings contain many valuable observations, not to be found in Celsus or Galen, and were even omitted by his successor Paulus. His account of the diseases of the eyes, is much more minute and complete than the chapter of Celsus upon the same subject. In the treatment of anasarca, he prescribes scarification of the extremities; not merely for the purpose of a temporary evacuation of the water contained in the cellular membrane, as had been recommended by Hippocrates, but made his incisions so bold and extensive, that he thereby, according to his own observation, not only relieved his patient of anasarca, but frequently cured him of ascites. Sylvius de la Boe afterwards

wards proposed to perform this species of tapping by means of a needle, and claimed the discovery as his own.

I have already remarked, that Hippocrates and Celsus made frequent use of caustics, especially in the treatment of dropsy, epilepsy, sciatica, and phthisis. Ætius also employed them, not only in the same complaints, but in many other diseases. In asthma, palsy, empyema, and affections of the head; in obstinate head-aches, or in injuries of the brain, he applied them to the nape of the neck, and to different parts of the head. He directed them to be long-continued, to be applied in great numbers, and made of a circular shape, that they might be slow to heal, and thereby afford a large discharge. In the bite of a mad dog, he directed them to be kept open forty or sixty days; and if, in that time, they should, by accident, be closed, he renewed their application. In this free use of caustics, he was followed by Paulus. The issues, as employed at this day, are found useful in the same diseases, for which the caustics were so successfully applied by the ancients. It is said by some, that the use of the *seton* was known to Ætius: this does not appear. Roland, of the tenth century, was the first who described this species of issue. It was afterwards spoken of by Rhazes and Albucasis, as much in use in their day. Dr. Freind remarks, that whoever reads the chapter of Rhazes on this subject, will find that the ancients understood the value of this remedy as well as the moderns.

Ætius also treated of the diseases of women. He notices the causes of difficult labour, and directs the mode of delivery, which should accordingly be pursued. In one respect, his work is imperfect; as he takes no notice of an important branch of surgery, fractures and dislocations.

Paulus Ægineta, so called from his birth-place, the island Ægina, flourished about the middle of the seventh century. He also was a pupil of the Alexandrian school. After finishing his education, he travelled into different countries, and thereby had more extensive opportunities of becoming acquainted with diseases than most of those who had preceded him. His works, accordingly, contain much original matter. His chirargical writings, in which he devoted a book exclusively to the operations of surgery, have been universally considered as more complete than any that appeared before the revival of learning in the fifteenth century. It is sufficient evidence of the value of the works of Paulus, that his writings, with those of Celsus, became the text books of Fabricius, a celebrated surgeon of the sixteenth century.

In his treatise on ruptures, the different species of hernia are more minutely detailed, and the operation more circumstantially

stantially described than by Celsus. That species of aneurism, arising from a wound or rupture of an artery, which was known to Galen, he describes with great accuracy, as well as the circumstances by which it is distinguished from other tumours. This is not all. In the treatment of the disease, he performed the operation for its removal, in the same manner as is done at this day, by securing the vessel above and below the part affected, and dividing it between the ligatures. He also describes the fracture of the patella, which was not noticed before his time. In chronic affections of the head, and in diseases of the eyes, he opened the jugular veins; and, in some instances, the arteries behind the ears. To render the operation of cupping more effectual, he improved the scarificator in such manner as to make several incisions at the same time. In cases of quinsy, threatening suffocation, he performed the operation of bronchotomy. He directs it to be performed about the third or fourth ring of the trachea, being a part which he observes is less covered with flesh, and where there is the least danger of dividing many vessels. He is also careful not to make the aperture larger than is sufficient for the purpose of respiration. In this operation, Albucasis afterwards copied Paulus, without an acknowledgment.

Paulus also improved much upon his predecessors, in the manner of performing some of the more usual operations of surgery. In extracting the stone from the bladder, he did not, like Celsus, confine the operation to childhood, but performed it at any period of life. He also directs the incision to be made, not in the middle of the perineum, as was done by Celsus, but upon the left side of it, nearly where the incision for the lateral operation is at this day made. Upon this subject he also gives another important direction; to make the external incision free and large, by which both the sufferings of the patient and the danger of the operation are diminished. Paulus also treats of the diseases of pregnancy, and was skilled in the practice of midwifery.

Such was the state of surgery among the ancients; and from the progress they had made, much also was to be expected from the labours of their successors: but a long interval of ignorance and darkness now ensues.

The civilized parts of Asia and Africa were overrun by the Saracens, under Mahomet and his successors. Being, from their religious tenets, the professed enemies to all knowledge not contained in the Koran, they ordered the celebrated library of Alexandria to be destroyed; and with it all the liberal arts had nearly perished.

About the same period, the Goths and Vandals overran the

the Roman empire. They also were the enemies of science, because they were strangers to it. But after the fury of the Saracens had somewhat subsided, the love of health and life, which is natural to man, induced them to revive the healing art, which had in a great degree shared the general fate of learning. The works of Hippocrates and Galen were sought for, and translated first into the Syrian, and thence into the Arabian language: in a few centuries, the Mahomedan governments abounded in schools of physic. Although the works of the most celebrated Greek and Roman writers were transcribed by the Arabian physicians Rhazes and Avicenna, the science of medicine received little improvement from their hands. In like manner, the knowledge of surgery, among the Arabians, was preserved, but not improved. The precept of Mahomet, which forbad the opening of dead bodies, must necessarily have prevented improvements in anatomy, and consequently retarded their progress in the practice of surgery. Notwithstanding the labours of Rhazes, Avicenna, Albucasis, and other eminent practitioners and teachers of medicine among the eastern nations, surgery received few or no additions, from the time of Paulus until the sixteenth century; when Fabricius, of Aquapendens, published his celebrated system, containing, not only the surgery of the ancients, but many original observations, which may be perused with much interest, even at this day. Of Fabricius, Boerhaave observes, "ille superavit omnes;" "omnibus potius quam hocce carere possumus."

Upon some future occasion, I propose to take a view of the progress of this art, from the revival of learning to the present period; in which I shall enumerate the advantages which the practice of surgery has derived from the discovery of the circulation of the blood, and the subsequent improvements in anatomy and the other branches of the healing art.

D. HOSACK.

For the Medical and Physical Journal.

Case of Organic Disease of the Heart, with Dissection; by JOHN GORHAM, M.D.

THE subject of this communication was a negro of an athletic form, and apparently about forty years of age. He came under my care in March, 1813. He entered the alms-house in December 1812, for a syphilitic complaint, and had been attended there by Dr. Jackson, for cough and difficulty of respiration, increased by exercise and by lying

in a horizontal position; these were accompanied with a tense, frequent, and occasionally an irregular pulse, swelling of the abdomen and feet, pains about the neck and shoulders, and paucity of urine. No pulse could be perceived in the right arm. He had been treated with quicksilver, expectorants, and diuretics.

The symptoms, when I took charge of him, were more developed. The cough was hard and incessant, accompanied with expectoration of frothy mucus, constant dyspnœa, violent palpitations of the heart, frightful dreams, from which he awoke in extreme terror and with a sense of suffocation; pulse irregular and often intermittent; swellings of the lower extremities and abdomen, and, a few days previous to his death, of the face and upper extremities; distressed and harassed countenance; urine high-coloured, and very small in quantity; and total want of appetite. He uniformly complained of pain and great distress at the stomach. On the 8th of April, his pulse, though irregular, was faint. I prescribed some medicine for him, but in five minutes he was dead.

Examination of the body twenty-four hours after death.—The left side of the thorax, when struck, resounded; the sound returned from the right side was like that produced by striking a solid substance. The muscles were of a dark colour. On opening into the thorax, the right side was found filled with transparent yellowish serous effusion. On the anterior and superior portions of the lungs were signs of slight inflammation. There was no adhesion, and the organ was apparently healthy. When divided by the knife, a considerable quantity of frothy blood-coloured fluid issued from the cut surfaces.

The left cavity of the lungs contained six or eight ounces of yellowish fluid. The lower portion of the lung was sound; the upper portion was white and crispy, and adhered by two membranous bands to the mediastinum; when cut into, it presented the same white appearance, and was much less firm than the other portions.

The substance of the pericardium was not thicker than usual. On its upper surface, there had been an effusion of lymph, which had formed a tough and elastic but thin membrane, about one inch in length, and half an inch in breadth. When opened, the cavity was found to contain about six ounces of a pellucid serous fluid. The heart, thus brought into view, appeared nearly of twice the natural size, and very turgid. The coronary veins were exceedingly distended, distinct, and prominent. On the superior surface there were appearances of effusion of lymph, particularly

around

around some of the smaller veins, the coats of some of which were white, and much thickened. The right auricle and ventricle were distended with coagulated blood; the semi-lunar valves of the pulmonary artery were sound. The left ventricle was filled with blood, for the most part fluid; its walls were thick and firm. The semi-lunar valves of the aorta were completely ossified, and the aorta itself was thickened, and its coats filled with osseous matter from its origin in the heart to beyond its arch. The mitral valves and the coronary arteries were sound.

Abdomen. The colour of the liver was lighter than usual. On the convex surface, near the suspensory ligament, there was a small effusion of lymph, and a greenish-coloured tumour, about the size of a bean, filled with a fluid resembling in every respect bile. The gall-bladder was of the usual size, and its duct pervious. The texture of this organ was natural, but, when divided, a blood-coloured fluid oozed out in considerable quantities.

The stomach was large, much thicker than usual, and its internal coat highly inflamed, in some parts presenting the appearance of a diffused redness, deep coloured, in others of innumerable minute specks of a chocolate brown; and the whole surface was covered with a thick tenacious whitish matter, resembling an intimate mixture of pus and mucus. With the exception of this substance, this organ was empty. The small intestines discovered signs of slight inflammation. The mesenteric glands were enlarged; the spleen and pancreas sound. The cavity of the abdomen contained two or three pints of clear yellowish fluid.

Cranium. The vessels of the membranes and brain were not unusually distended; and the only circumstance observed, which requires to be mentioned, was the effusion of serous fluid in considerable quantity into the ventricles.

The appearance of the stomach satisfactorily accounted for the constant pain and anxiety experienced by the patient in the epigastric region.—*New-England Journal.*

For the Medical and Physical Journal.

Case of Disease of the Heart; by JOHN P. BATCHELDER, M.D.

THE patient was an infant four months old. From the birth it had been troubled, at times, with a difficulty of breathing, palpitations of the heart, and an increasing cough. Its breathing, when laborious, was accompanied with a peculiar sound. It could never bear an erect or sitting posture. The position in which it experienced the most ease was on

the right side, partly inclined on the face, or directly on the face, with the head and shoulders incurvated. At the age of two months, our little patient was assailed with a most troublesome and obstinate cutaneous eruption, which might be considered almost epidemic in this part of the country, during the latter part of winter and spring. About a fortnight before he died, the eruption began to go off; and at the time of his death it had almost entirely disappeared, leaving only its sequelæ behind. On Tuesday all the symptoms were greatly aggravated; Wednesday they were very alarming, and continued to increase, with some intervals of ease, until Saturday about noon, when the child expired. During the paroxysms of distress, it was painful to behold him. At times the temperature of the body, and of the head in particular, was considerably increased; but, for the most part, the body and extremities were cold, and covered with a clammy sweat. He was frequently affected with syncope, which sometimes appeared more like extreme prostration of strength, than real fainting. At other times he was affected with agitations, which very much resembled convulsions. On Sunday the body was examined. We found some water in the ventricles of the brain, more than usual, I should conjecture; the exact quantity, however, could not be ascertained, for reasons soon to be mentioned. The blood-vessels were turgid; and there were some slight appearances of the cream-like matter, which is the result of inflammations about the brain. It is to be regretted that a nice dissection of the brain could not be made, on account of the derangement that organ suffered, in consequence of the violence we were obliged to use in removing the cranium, which adhered so firmly to the dura mater at the sutures, as to render it impossible to separate them without the knife. Whether this strong adhesion was natural, or the effect of disease, I am unwilling to decide positively, having never before seen the skull of an infant raised. Besides the disproportionate heat about the head, there were so many other symptoms indicating an affection of the brain, as to induce the family and the two attending physicians to believe, that the seat of the disease was in the head. The parents the more readily adopted this opinion, as they had lost several children, affected in a similar manner, whose diseases had been considered by their physicians affections of the brain. The lungs were perfectly collapsed and natural. Not the slightest adhesion could be found. The pericardium was discoloured, and contained about an ounce and a half of sero-purulent fluid. The whole surface of the heart was covered with a flaky purulent matter. The substance of the heart appeared natural. In the ventricles were formed what

I shall

I shall call polypi, for want of a more scientific name. That these had been formed previous to the child's death, I have but little doubt, as they had considerable strength of texture, and adhered so firmly to the *columnæ carneæ*, that they could not be separated without tearing their substance. The contents of the abdomen were all natural except the liver, which was very large in proportion to the other viscera. The gentlemen present were of opinion, that this was a morbid enlargement of the liver. It struck me as the "sanguineous engorgement" of the liver, mentioned by M. Corvisart, as frequently occurring in diseases of the heart from an obvious cause: an incision into its substance corroborated the opinion.—Do enlargements of the liver in affections of the brain proceed from the same cause? Is the circulation in some affections of the brain rendered slow and intermitting, by a direct sympathy between the heart and an oppressed brain, or only through the instrumentality of the lungs? What is the reciprocal influence of the brain and heart upon each other in disease and in health? We see patients with diseases of the latter, subapoplectic for days and even weeks before death, as happened in a case I witnessed the last spring. Does the enlargement of the liver, in our case, explain the reason why the child preferred the posture before-mentioned? A transudation of bile had given a part of the arch of the colon a deep bilious tinge. Absent on a journey, I did not see the patient until the day but one before its death. From the symptoms and history of the case, I was of opinion that the principal seat of the disease was within the thorax. Its precise character I could not determine. I advised the application of a blister upon the breast, and the use of the tincture of foxglove, which seemed to give a temporary relief.* The disease of the head, if any such existed, I considered secondary, knowing that the brain, the heart, and the lungs may be all secondarily affected, when the principal seat of disease is in either, and also that they may be similarly affected when the primary seat of the disease is in the skin.

The nature of diseases of the heart, together with their causes and connections with diseases in other parts, have become a very interesting subject of medical investigation. It is not long since the faculty, in general, have begun to suspect them; and for the most part they are, at present, considered incurable. But when we recollect how many other diseases have been so considered, which are now very ma-

* In diseases of the heart, I have seen great relief, and even the disease apparently kept at bay, by the foxglove alone, or by a combination of it with squills, soap, opium, and calomel in form of pills.

nageable,

nageable, we must not despair of finding a cure for this formidable and most distressing class of diseases. By ascertaining their remote causes, may not physicians be able to *prevent* them? By learning to detect and distinguish their proximate causes in their earliest stages, or by tracing their connection with other diseases, may they not discover the clue which leads to a successful method of treatment? The epidemic which prevailed among us last winter and spring, was very successfully treated by emetics, sudorifics, epispastics,† and a judicious application of external warmth; and, from observation, and some dissections I have had an opportunity to make, I am convinced, that the *heart was more or less the organ principally affected, in almost every severe case.* As the same torpor upon the surface, coldness of extremities, clammy sweat, small, frequent, and often irregular or intermitting pulse exist in many, if not all the diseases of the heart, may we not, reasoning from analogy, infer that similar remedies may be useful in a generality of those cases? I have a patient now under my care, labouring under a chronic disease of the heart, who has been invariably relieved by the means above mentioned. Dilatations of the heart or aorta, ossifications of the valves, or any other cause of obstruction to the blood in its passage through the pulmonary or aortic systems, produce strong palpitations of the heart, and irregular or intermitting pulse, while in simple inflammation of the heart, its irritability being increased, a smaller quantity of its natural stimulus causes it to act; hence the very small and frequent pulse which accompanies that state of disease.—*New-England Journal.*

Charles-Town, N. H. Sept. 1, 1813.

For the Medical and Physical Journal.

Opinions concerning the Case of Joanna Southcott.

YOU will readily conceive our anxiety for news on our first return to old England; but, whilst we were waiting with eagerness for something about the Princess of Wales, or the Princess Charlotte, nothing resounded on our deck but that a boy had died with child undelivered, and that a virgin

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† Having observed that no patient died where a strangury had been produced by cantharides, I was disposed to give it internally, when a free external use did not bring on a strangury. The practice succeeded perfectly. By producing a strangury, we made a diversion in favour of parts more immediately essential to life. The strangury was distressing to bear, but nothing was to be feared from it, it being under the controul of medicine.

that

of 65 was pregnant. Some of the most ingenious among us accounted for these wonders by concluding that all hands were at work to repair the ravages of the late war. To others the first part of the intelligence was so well known, as to direct the whole inquiry to the old lady's condition. Here it was said there could be no doubt, as several medical gentlemen had attested it. Among others, I heard the name of my old master, whose certificate of my regular attendance on his lectures I had often exhibited with pleasure, not to say with triumph. I soon found all eyes fixed on me. It was in vain to urge the impossibility of such an illusion. The words of Mrs. Southcott were the only answer I could hear. From jokes we seemed approaching to something more serious, when an old lieutenant, determined to see the fun out, begged they would not be so hard upon *their doctor*, but hear him out.

Delighted at this apparent candour, I now began to explain myself with much formality, and was pleased with the profound attention with which I fancied myself listened to. Every thing went on very well till I attempted to explain the probable cause of the sensation like *life within her*. On this subject I began by remarking, that, if the apparent pregnancy arose from tumours connected with the uterus or its appendages, the gradual increase of such tumours might produce a motion in the intestines, which the old woman might fancy the motion of the child; or even the contractile power of the tunics of hydatids, which many medical writers consider as animals, might produce a sensation which might be fairly applicable to Mrs. Southcott's condition. An universal peel of laughter succeeded, after which, every attempt at renewing the subject proved abortive, and the gentleman who had set me a-going thought it time to check me. With the kindest intentions in the world, he asked, whether I was sure that, whatever might have been the former merits of my master, he was not now in his dotage? A cannon-ball could scarcely have silenced me more effectually. Is such the lot of human nature, thought I,—such the change in one whose eloquence a few years ago could arrest the attention upon the most intricate subjects,—the man but for whom Mr. Hunter would have been known only by his discoveries in natural history, whilst his medical doctrines would have remained unknown, or not understood,—the man by whom a Baillie submitted to be taught on a subject connected with his own particular department.* Is such a man,

* See Dr. Baillie's candid note on the cancerous uterus, in his second and every subsequent edition of his Morbid Anatomy.

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in so short a time, reduced so low?—I suppose my countenance spoke for me. A dull silence succeeded the former peels of laughter, whilst I retired with precipitation.

I was much gratified with Dr. Adams's Treatise on Hereditary Diseases, a subject on which we had always heard him with peculiar pleasure, and expressed our wish that he would publish, as nothing resembling his doctrine was to be met with in any other writer. Dr. A., in my opinion, has successfully combated Mr. Locke's definition of madness; offered the first explanation of scrofula, a term to be met with every where, but no where explained; and corrected a most important error copied from Aretæus, by almost every writer on the subject of leprosy. This error, I find by your Journal, has been revived by a late writer in his compilation on Cutaneous Diseases, and is again confuted by referring to a case at this time accessible to all the faculty.

But I am probably telling what every one knows excepting ourselves, to whom every thing is interesting, because every thing is new.

A Medical Officer in His Majesty's Service.

Portsmouth, Sept. 6, 1814.

For the Medical and Physical Journal.

Case of the Paroxysm of Gout removed by the Tincture of Colchicum; by Mr. WANT.

IT was observed by Dr. Sutton, in his letter on my mode of preparing the Eau Medicinale, that the colchicum, which I consider to be the basis of the remedy, produced its beneficial effects by its purgative operation; and distinctly asserts that even common purgatives are capable of removing the disease with equal facility. For the complete refutation of both these assertions, I may refer to our last Number, where the subject is considered at length; but a case of gout cured by colchicum has since occurred to me, which will, I think, be admitted in proof that purging is not essential to the success of this medicine. It will be observed that in the subject of this case the paroxysm was twice removed,—the first time by a full dose of the remedy, which occasioned, as is most common, a strong action on the bowels; but on the second attack, being attentive to avoid the excitement of purging, the disease was as well cured without it.

James Beddell, residing No. 18, Grenville-street, Somers Town, has been severely afflicted with gout for the period of fourteen years. The paroxysms attack him three or four times a-year, mostly lasting about two months, but latterly much

much longer. When he applied to me about six weeks ago, he had been confined to the room about five months. A dram of the dried colchicum only was ordered, but, from some mistake in the gentleman who was to superintend its effects, a second was taken, after an interval of eight hours. The symptoms were nearly removed before the second dose was taken. The man was purged and vomited during the space of four days, with loss of appetite, and intense head-ach. Two days previous to the drawing up of this case, he applied to me for more medicine. The disease had returned in the left knee, thick part of the thigh, and calf of the leg, with swelling of all these parts: the fingers were also affected. Undismayed by the severity of operation he had endured, he requested a repetition of the medicine. Half a dram of fresh colchicum was given to him at ten o'clock in the evening, but the pain continued unabated till night, and at eight next morning he had *one motion without relief*. He took another half dram, and in two hours more began to mend. At half-past one, the time of noting this account, he could move himself more freely, though still unable to walk without a crutch; was able to raise his leg, and keep it, unsupported, in a position nearly horizontal; no more evacuation from the bowels had been experienced. The swelling has left the finger, leg, and thigh, and has almost disappeared in the knee.

The pain felt was described as a gnawing sensation, with no feeling of heat or cold, though in general, in former attacks, the parts affected were very hot, and the urine was scalding. The sensible effects of the remedy, previous to the relief afforded, on this occasion, were not discoverable, if we except the one evacuation; and that this was not the cause of benefit is obvious, from the fact that the pain did not diminish until two hours after, when the second dose had been taken.

Whitehair, a beadle of St. Pancras, obtained from the preceding patient a dose of the medicine. He had been hobbling about Somers Town for several months, and, after taking it in the evening, was in a few hours completely relieved, and able to walk the following day free from pain. He had four evacuations from the bowels, which commenced about five o'clock in the morning; but he assures me the pain was essentially relieved before that time. I should not consider a case of this kind to be conclusive, because I have certainly seen the same effect from elaterium. Where this has been the case, I have been accustomed formerly to account for it by the supposition that, although no evacuation from the bowels *preceded* the removal of the pain, yet the *morbi jones* might be dislodged and evacuated from the stomach and upper in-

testines, perhaps the only parts capable of being influenced by it, long before it was expelled from the body. In many, if not all the cases where the disease has yielded to the colchicum, and vomiting has been excited, a considerable quantity of very viscid bilious matter has been brought up, with great relief of the symptoms. Emetics are also useful in gout. But the colchicum, though it has generally a purgative and often an emetic property, appears to have some specific operation in the treatment of gout, which it remains for future experiments to develope. It produces sleep in most cases where I have used it in this disease, far more readily than the greatest dose of opium. Whether this is the consequence of its real anodyne powers, or of its specific property in curing those forms of gout to which it is applicable, I shall not enter upon at present.

JOHN WANT,
Surgeon to the Northern Dispensary.

North Crescent, Sept. 1814.

COLLECTANEA MEDICA,

CONSISTING OF

ANECDOTES, FACTS, EXTRACTS, ILLUSTRATIONS, QUERIES, SUGGESTIONS, &c.

RELATING TO THE

History or the Art of Medicine, and the Auxiliary Sciences.

Memoir upon the compound and smooth or simple Eyes of Insects, and on the Manner in which these two Species of Eyes concur in Vision. By M. MARCEL DE SERRES, Professor of the Sciences in the Imperial University.*

Visus igitur quo insecta gaudent nulla penitus ratione cum nostris oculis aut cum camera obscura in qua rerum species, reflexionis ope, super charta aut panno albicante pinguuntur in comparationem venire potest. SWAMMERDAM, *Biblia Naturæ*, tom. i, p. 502.

SIGHT seems to be one of the most perfect of the senses of insects; and in this respect these animals are in the first line among those without vertebræ, as birds are among those with vertebræ. Both enjoy a very long sight; and we know at how great a distance the maggot, like the bird of prey, perceives the object which it wishes to devour. Is the great quantity of air inhaled by these two orders of animals in the act of respiration, the cause of the acuteness of this sense, as it is of their muscular strength? or

* *Phil. Mag.* from *Magasin Encyclopédique*, Feb. 1814.

must we account for it from the great development of their retina and the largeness of their eyes? However difficult it may be to resolve a question abounding so much with difficulty, it is probable that insects and birds owe equally to the great abundance of air which they inhale, the acuteness of their senses, and the activity of their digestion; finally, the violence of their passions, if we may so express ourselves.

Far different from the vertebral animals in the structure of their eyes, insects enjoy the impression of external objects by means peculiar to themselves, and which furnish proofs that nature knows how to attain the same ends by very opposite ways. In fact, the operation of vision is not performed by insects in the same way as with most animals by the action of the luminous rays, which, after passing through the pupil, collect on the retina, but rather by the shaking of the optic nerves occasioned by the light which passes through the cornea. These eyes are constructed so as to receive the images of objects by the simple shock of the rays which these objects reflect, and this method of feeling must necessarily be very acute. Besides, insects not having, like the vertebral animals, pupils susceptible of contracting, it would seem that vision ought to be very perfect with them, on account of the great number of rays which fall continually on the facets of their eyes.

Nevertheless, one of the great inconveniences which results from the organization of insects, is the kind of immoveability of the parts in which their eyes are fixed. But nature has remedied whatever is unfavourable in this organization, by rendering the eyes of insects very much complicated, and by multiplying their facets in such a way, that one and the same eye presents as many as fourteen thousand, as Hooke observed in the *libellulæ*.* Nature has even sometimes multiplied the number of the eyes themselves, and this number seems to be always in the ratio of the size of these very eyes, and the immoveability of the parts in which they are situated. Thus, when the compound eyes are entirely wanting, the number of the flat or simple eyes is greatly increased, and certain species have thus even six pair of eyes. This is observed in some of the apteræ, many of the larvæ, and particularly in the spider. Indeed, the latter should be separated from the insects, as Messrs. Lamarck and Cuvier have already done; for their organization presents some very marked distinctions, and of the first importance. In fact, the spider, like the scorpion, has a kind of lungs, and consequently a real heart with blood-vessels; whereas, in the real insect, the organs of respiration are always ramified, and the vascular system, or at least what has been taken for it, never is. Sometimes, however, the eyes of insects are not situated in parts entirely immoveable, and certain species

* Swammerdam, *Biblia Naturæ*, tom. i. p. 490, and *Collection Academique*, p. 323. Hooke has given the eyes of the *Libellulæ* in his *Micrographia*, plates xxiii and xxiv.

present a kind of neck, which Comparetti* seems to have been the first to observe, and which permits the head to execute a variety of movements. This neck is very conspicuous in some of the carnivorous species, which not being able to pursue their prey on account of the disproportion of their organs of movement, require the faculty of seeing to a great distance. This organization is very evident in the *mantis*, the *empusa*, and the *mantispa*, in which the head may be directed to one side, or backward, and may even be twisted almost round. It may be remarked, in general, that the eyes are the more convex and the more salient, the more decidedly carnivorous the insect is, as the mobility of the parts in which they are situated, is always relative to the kind of life and to the habitudes of the insect. In short, we never saw the eyes of these animals present any kind of movement, and they always adhere to the parts where they are situated, and consequently are completely immoveable.

The sight is exercised by insects by two organs very different from those which perform this function in the vertebral animals and the *mollusci:* they exhibit even very striking differences from each other, as well in respect of their external conformation, as in their internal disposition. Some appear to be a large cluster of eyes united together, if we may so express ourselves, and others exhibit one only. The former have been called *compound eyes*, on account of their arrangement; and the latter smooth or simple eyes, on account of their simplicity. These two kinds of eyes concur to the same object, and are sometimes united on the same individual: thus the *orthopteræ*, like the *hymenopteræ*, present at once both compound and simple eyes, a disposition which is also observed in various kinds of *hemipteræ*, *neuropteræ*, and *dipteræ*. The other classes present only a single kind of eye; but, when there are only smooth eyes, their number is always considerable, probably in order to make up for their imperfection. In general, all winged insects have compound eyes, and this law does not seem to present any exception. In the *apteræ*, certain kinds present only compound ideas, such as the *cloportæ*; in truth, the latter seem formed by a collection of simple eyes. Other kinds have only simple eyes; such are the *julæ* and the *scolopendræ*, which present a certain number of simple eyes; but all these animals appear to me so different from the insect tribe in point of organization, that I have thought it right to pass them over.

With respect to the larvæ, those of half-metamorphosed insects uniformly have eyes similar to those of the perfect insects; whereas the larvæ of insects wholly metamorphosed have only simple eyes, which vary much in their number and position. The caterpillar has six or eight on the sides of the head. The false caterpillars, or the larvæ of common flies, have only two, like those of bees and the *stratyomæ*. Finally, a great many completely metamorphosed larvæ have no eyes at all.

* *Dinamica Animale*, part i. p. 103 to 106.

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We may always remark, that the species which exhibit both compound and simple eyes (which has never been observed but in perfect insects) are those which have most need of seeing far, either because, by rising high in the air, it is requisite that they should distinguish their prey at a certain distance, or, because, having large flights to take, they should direct themselves with safety. In short, the insects of a great flight, like birds of prey, have very delicate and very extensive powers of vision.

But in order to give an exact idea of the two kinds of eyes of insects, we shall describe each in particular, commencing with the compound eyes, the organization of which is most complicated, and terminating our description by the simple eyes. We shall afterwards endeavour to ascertain in what way the faculty of vision is executed among this order of animals, when we have followed up all the differences of organization which they present with respect to their eyes.

1. *Compound eyes.* The compound eyes are generally situated on the lateral or middle parts of the head, sometimes even completely at the base of it, and a few are placed near the antennæ, or more or less laterally and outside of these parts. Placed in orbitary cavities, they are protected not only by the sides of these cavities, sufficiently hard to oppose the impression of external bodies, and by their external membranes, which are almost as hard as the shelly envelope which covers the body, but also internally by soft parts, which seem to consist of tracheæ only. In the animals with vertebræ, the eyes are besides protected by several soft parts like the cartilages, the membranes of the eye-brows and eye-lids, which conceal them under a thick veil, and defend them from external objects. These parts, called by Haller *tentamina oculi*, are totally wanting in insects; and, besides, after knowing the conformation of their eyes, of what use could they be?

We must, however, observe, that some insects present in their cornea, and in general on the furrows which separate the hexagonal facets of this membrane, fine hairs, more or less long, and more or less thick. These have been regarded by Swammerdam and other anatomists as the eye-lashes of the eyes of insects, although they do not seem to perform their office: in fact, they appear to be so little essential, that they are wanting in the greater number; and when they are observed, they are always arranged on the lower part of the eye, a position which is far from being the most favourable to guard it against the admission of foreign bodies. Besides, scarcely any but the most glutinous bodies can adhere to the convex or polished surface of the eyes of insects; and, when they do, the animal can easily remove them with its fore legs. This is frequently observable in bees and flies, which take a pleasure in repeating the operation.

The situation of the eyes, or rather their position, is very variable in the different classes. As this position has a great influence in vision, we shall describe it in the chief families.

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The most external membrane of the compound eyes is hard and transparent: it might therefore either be called the *sclerotica* on account of its hardness, or *transparent cornea* from its transparency. This last denomination agrees with it perfectly, for, as Swammerdam remarks, it has the flexibility, the firmness, and transparency of horn. This cornea or sclerotica, convex externally and concave internally, is formed by an infinity of hexagonal facets arranged with the greatest regularity alongside of each other. These facets, divided or separated by furrows which always follow the direction of the cornea, exhibit in some insects, the *hymenopteræ* in particular, hairs which resemble down. As to the lines or furrows of the facets of the cornea, they are curved and a little folded on account of the spherical convexity of the cornea, which interweaves in different places the hexagonal facets with the lines which separate them. In a word, the whole cornea is a true hexagonal net-work, the internal surface of which is divided into as many hexagonal facets as there are at the external surface.

Swammerdam thought that the cornea received some tracheæ, and that these constituted the hexagonal meshes of the cornea. He seemed to think also, that these tracheæ could in the eyes of the *nymphæ* serve for their expansion and unravelling. As to the first of these opinions, it does not seem to agree with the organization of eyes in general; for it is very rare that the tracheæ penetrate through the choroid and reach the cornea; and I only know one example, and that is the *libellula vulgaris*. The second fact, being only a consequence of the first, cannot be admitted, if it be true that the tracheæ rarely ever reach the cornea.

The form of the cornea necessarily determines that of the eye, and seems to have certain relations with the manner of living of the species. Sometimes this form varies in its proportions, and that in the species of one and the same genus; but it seems as if the *sphericity*, or the more or less angular form of this same cornea, is little subject to vary. In general, the cornea is the more spherical, and the more projecting, in proportion as the animal is carnivorous, or when the eye is concealed under a flap of the eye-lid, as we see in the *lampyræ* and others, where the sphericity of the eyes is so considerable, that it comprehends almost the whole head. We may also observe, that the smaller the compound eyes are, the greater is the convexity of the cornea. It is not the same with simple eyes, which in general vary little in point of size.

In order to give a precise idea of these variations, we have described them in a certain number of families, in order that their importance may be known. The cornea is in general cased in a cavity in the hard parts of the head. This union is so complete that it is frequently impossible to separate them: we might even doubt that any separation was possible, were it not for a small ring externally, which marks the line of adhesion. When the cornea is entirely separated from all the parts situated below its internal face, as if from its covering, it seems white and brilliant, which renders it similar

similar to horn. This horn is very thick in certain species. It is transparent if we examine it externally; but, when it is not freed from the other parts situated below, it presents either bands or stripes of various colours, or a marbled appearance. It seems even completely black in a great number of species: most of the *coleopteræ*, *hymenopteræ*, and *lepidopteræ*, present this arrangement.

To conclude—this black colour and marbled tinge do not by any means belong to its texture, but depend, as may be easily ascertained, on the difference in thickness, and the various colours of the humour which adheres to it.

Under the cornea is seen a conduit or pipe, not very liquid, not soluble in water, and strongly adhering to this membrane. Its colour, in general, is between the darkest violet and the deepest black. When this coating presents this colour, which is most frequently the case, it is almost impossible to distinguish it from the humour of the choroid. This is not the case in the eyes, the coating of which is red or green, or of both colours united. We then see very distinctly the coating with its variegated colours, and the humour of the choroid with its black tinge, which never varies. This arrangement is very conspicuous in the *locusta gigantea*, *lilifolia*, the *libellula vulgaris*, and the greater number of the *tabani*. It is also very striking in the *gryllus lineola*, the eyes of which appear to be streaked with brown and green bands, and which is indebted for this singularity to the coating of the cornea being alternately brown and green, and that by nearly parallel bands.

It is, therefore, to the mixture of the tints of the tunic of the cornea, that the variegated colours presented to us by the eyes of insects are owing, precisely in the same way as, from its various degrees of thickness and colouring, the variegated stripes and marble tint arise, which appear at the exterior part of the eye, and which might have been thought peculiar to the cornea. Frequently, as a consequence of this arrangement, one and the same eye presents spots and stripes of various colours, or even one side of a colour totally different from the other.

The coating of the cornea, therefore, covers all the internal surface of this membrane. Its thickness and consistence, like its opacity, are very much subject to variation, as already observed; but it would seem that, in general, the more this tunic is opaque, the thicker and broader are the nervous threads which pass through it, in order, perhaps, that its opacity may not be an obstacle to vision.

We are under the necessity of anticipating a little upon our description, and of speaking here of the optic nerves, which, furnished by the retina, pass through the choroid and its humour, as does the coating of the cornea, in coming into correspondence with the facets of the latter membrane. This arrangement is not the same in the species which present bands or stripes, and in those which want them. If we carefully remove the cornea, and in such a manner as to remove very little of its coating, we observe, in the species in which the compound eye presents stripes externally, this coating to be composed of very distinct rays, one of which is blackish, and the other

other much deeper, and so on alternately. These two colours are far from being uniform; and, however slightly we look at them, we soon perceive an infinite number of polygons, the centre of which appears to be white. All these white points are the extremities of the nervous filaments coming from the expansion of the grand optic nerve,* or from the retina, and which have traversed the choroid and its coating. We may convince ourselves of this in the following way: the brain being laid bare, we may follow the optic nerve, and see it directed to the eye, where it spreads, and is divided into a multitude of filaments. But if we draw these filaments, the white points disappear completely, and there only remain on the coating streaks variously coloured, which proves that these white points are the extremities of the nervous filaments. We may recognise this arrangement in the great species, such as the *libellulæ*, the *truxalæ*, and the common cricket. In the species which have no streaks on the cornea, we also observe on the coating of the cornea, the furrows or ridges which form the facets of this membrane, and the coating, which is more or less deep, having the form of a polygon, which represents the facets of the cornea.

These retinæ, peculiar to each facet, are those which Swammerdam has called the pyramidal of the eye. These compound fibres, according to him, proceed to a membrane as to a common centre, and it is the circular trachea from which the filaments issue: he also observes correctly, that it is through its substance that the tracheæ pass which ascend along the pyramidal fibres. The figure of these fibres is hexagonal, and their upper extremity is broader than their lower, spreading out a little, as it would seem, when they get into the concavity of the cornea, and taking the form of this membrane.

To conclude—Swammerdam states that he never was able to ascertain whether these fibres were muscular or nervous, although it would have been easy to convince himself of it, since they may be followed to the brain. As to the transverse fibres which Swammerdam has described,† I never perceived them. I am led to think that this expert anatomist must have made a transverse section in the eye and the brain, and that he formed these fibres by the section which he made in the optic nerve. At least, it is certain that these fibres communicate with the brain, for Swammerdam himself admits it: he remarks even that we might compare them to a very considerable nerve which we observe in the furrow, which nerve derives its origin from the brain.

In order to observe these white points, or the extremities of the nervous filaments which compose the particular retinæ of each facet, the cornea must be carefully removed, operating its section from

* We designate the nerve which proceeds to the compound eyes under the name of grand optic nerve, in order to distinguish it from the optic nerves which proceed to the simple or smooth eyes.

† *Biblia Naturæ*, tab. xx. fig. 5.

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the outside to the inside, and taking care not to remove the coating; for, however little we disturb the filaments, they are so contractile, that they close in upon the optic nerve, and no longer appear on the coating of the cornea. If, instead of dissecting the eye from the outside to the inside, we observe it by successively removing the internal parts, we can never discover this arrangement, even in the genera where it is most decided, such as the *gryllus*, the *mantis*, the *libellula*, and the *tabanus*. This depends on the contractibility of the optic nerves, which is sometimes so great as to draw the filaments even beyond the choroid.

Immediately under the optic filaments and the coating of the cornea we observe the coating of the choroid. This coating or varnish is a viscous substance, not liquid, soft, very clammy, and not very soluble in water. It is also strongly adherent to the membrane which it covers, when the latter exists. Swammerdam remarks, with great truth, that this opaque varnish stains the fingers like the common *pigmentum nigrum*. But this accurate observer seems to have confounded the coating of the cornea with the varnish of the choroid, when he says that the latter is variously coloured, according to the species. On the contrary, the black colour, and the opacity of the varnish of the choroid, are established beyond contradiction. This colour even seems to be internally connected with the texture of the choroid, for it is impossible to discharge it by repeated macerations. Contrary to the opinion of Hooke,* Swammerdam thinks that there does not exist in the eyes of insects any humour properly so called; and, in fact, neither the tunic of the cornea, nor the varnish of the choroid, deserves the name of humour, particularly if we compare them to what is understood by the term humour in the eyes of vertebral animals. Finally, the same anatomist regards the blackish varnish of the choroid as the extremity of certain fibres placed immediately under the cornea, fibres which have been torn on removing this membrane. This explanation appears very improbable, since, when the tunic of the cornea is of a colour different from the varnish, there never exist any blackish fibres corresponding with this same cornea. Besides, how could the colour of this varnish be always the same with that of the choroid? This single fact demonstrates, in my opinion, an analogy between the choroid and its varnish: it would even seem that the latter is produced by a kind of transudation which takes place through the meshes of this membrane itself.

If the varnish of the choroid be formed by a transudation of this

* Hooke and Boyle were the first who maintained that air was necessary to combustion and respiration, and that those operations consume but a certain portion of it. Hooke even conjectured that air was fixed in nitre, and that combustion was a chemical process, i. e. the solution of the burning body in a fluid, or its union with this substance. The chemists of the present day hold no other language. *Micrographia*, pp. 45, 104, 105.

membrane, it is evident that this varnish ought always to cover it, and this is precisely what is observed. But this varnish, as well as the choroid itself, does not always exist: it would seem even that all the species which shun the light are totally deprived of it. At least I have not observed it in the *blaps*, the *pedinus*, and most of the *tenebrios*: it is wanting beyond doubt in the *blattæ*, which, as is well known, are stupefied with the light of the sun. When the varnish and the choroid exist, it is not very difficult to separate this membrane from the varnish. It seems, then, to be most generally cellular; and in certain species, the longitudinal fibres of which it is composed are sufficiently decided to make it appear slightly streaked, on account of the tracheæ which are distributed over it: this is distinctly observable in the *truxalæ*. This arrangement has been well described by M. Cuvier, in his Memoir on the Nutrition of Insects, p. 42, tab. i. fig. 3. This organisation might induce a belief that the choroid is formed by the prolongation or union of the small tracheæ furnished by the large circular trachea: at least, all the tracheæ which proceed to this membrane are totally lost in it; and, as we cannot recover them, after they reach it, we ought to regard them as contributing to form the choroid. This membrane is therefore composed of a cellular texture tolerably close, on which there exists a collection of tracheæ furnished by the large circular trachea, and which are imbued with, or rather deeply penetrated by, a blackish varnish. The choroid is more or less black, but always opaque, and its sombre tint is as constant as its opacity. Finally, the longest macerations cannot make it lose its colour or opacity, as we have already observed.

(To be continued.)

CRITICAL ANALYSIS

OF RECENT PUBLICATIONS

IN THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

Review of some Observations on Medical Reform, made in the Pamphleteer No. VI. by a Member of the University of Oxford.

THE sixth number of the Pamphleteer contains an anonymous pamphlet on Medical Reform, by a Member of the University of Oxford, and, if we are not mistaken, by a Fellow of the College of Physicians of London, from the zealous support he gives to that body, and the increased power he demands for them. He is a *seeming* enemy to reform whether political or private, but at the end of his production recommends one of the most despotic descriptions that has ever yet been devised by the most strenuous advocate for medical reformation.

The object of this publication is to decry Edinburgh graduates, and exalt those of Oxford and Cambridge; and why? because, forsooth, at Oxford and Cambridge "they regularly attend prayers in the public chapel, and meals in the public hall, and lectures in the public room; never sleep out of their College, or return late within its walls." Thus it is that the Oxford doctors pray, eat, and sleep their way to their degrees, by keeping a certain number of terms, as barristers find their road to the bar; but that they undergo no examination, no real test of the sufficiency of their acquirements, is universally notorious.

We are willing to speak of those Universities with due respect, as venerable and respectable seminaries of classical and mathematical learning; but we affirm that they have no pretensions to the character of medical schools, for it is well known that they have no medical lectures which deserve the name, and the pupils are not obliged to be present even at the ceremony of their delivery, and may absent themselves without hearing the voice of admonition, or feeling the hand of controul. The professorship of physic at Cambridge is a sinecure, and no lectures whatever are delivered; and Sir Busic Harwood's "anatomical lectures are only calculated to convey general instruction, and are not confined to any particular profession."* The lectures on anatomy continue only a few weeks, and the Professor rarely has a fresh subject, unless the body of some unhappy criminal be remitted to him for dissection by the sheriff of the county. Their lectures, then, are superficial, and chiefly on comparative anatomy, and teach no more than every well-educated person ought to know. Clinical lectures are not known, nor do the students visit the sick in the hospital.

Woe, then, to the patients who fall into the hands of physicians thus instructed! Will it be urged that English doctors are often well educated, and men of celebrity in their profession? We grant it; but they obtain their knowledge at Edinburgh or London, where all of them go, not only to learn the elements of their profession, for that even Oxford and Cambridge cannot teach them, but to finish their medical education, and at these places some of them have laid the foundation of future and deserved eminence. What a figure would our Oxford doctor cut with a scalpel in his hand, if educated only at Oxford! Whence (if he has any) did he derive his knowledge of surgery, or the treatment of diseases? Surely not at Oxford. There are no dissecting-rooms at either of our English universities; and, if a fresh subject were to be exhibited, half the students of the place, whether of law, divinity, or general literature, would crowd to behold it; whereas at Edinburgh there are public dissecting-rooms in the college, under the superintendance of Dr. Monro and Mr. Fyfe, and several private ones in the town, conducted by anatomists of known talents.

Our author says, "in this course of study they continue four

* See Cambridge University Calendar.

years before the first degree can be taken, and the students of medicine must devote themselves to their particular studies for three years more, before they can receive another degree, which only entitles them to apply for a licence to practise or become physicians. If the physician aspires to be a doctor of medicine, he must wait four years longer, before he is entitled to receive this honour." All this we admit; but let us ask for what good purpose? Is it not well known that a mere term-trotter, who attends "prayers in the public chapel, and meals in the public hall," for a few weeks in the year, and spends the rest of his time in snipe-shooting, or any other idle amusement, is entitled to the same privileges, without even the ceremony of an examination, or trial that deserves that name, and without the possibility of obtaining any professional information? And this is the education to be obtained in the "English universities, which will place the men who are fortunate enough to be educated in them above the level of ordinary men."—"Physicians," we are told, "rank as barristers and clergymen; but the English universities, when they confer the degree of doctor, elevate a man to a rank next to a knight." The self-importance of our author is really ludicrous; let him beware, lest, like the little animal in the fable, his intumescence be the cause of accident.

And again: "At the school of Edinburgh (for it is miscalled an university) the teaching is elementary." What, then, have the celebrated Cullen, the Monros, the Blacks, the Gregorys, the Homes, and many others, frittered away their time in teaching only the elements of their profession? Where, then, did Hunter, Currie, Darwin, Brown, Percival, Fothergill, Saunders, with a host of the most eminent physicians of the present day, obtain that information which elevated them to the highest pinnacle of professional fame, for they were not "fortunate enough to be educated at an English university?" Let us look around us, and we shall see an Edinburgh graduate, not "pushing the old apothecary out of his place, and becoming the middle man," but taking the lead in practice in almost every town in the kingdom, not because his degree gives him any particular privileges, but because he has earned that situation, and is entitled to it by his professional acquirements.

Three years study our author thinks too short to be admitted to practice; and we agree with him that it is, and should be glad to see the time extended to four or five years: but we doubt whether there are more raw boys sent from the Scottish universities, in proportion to their numbers, than from the English, where very few medical men are educated; and we know instances of young men from the latter being, on account of their youth, refused admittance into a sick room, or their prescription put into the fire when they have been called in by mistake, or sent in lieu of another. It is again objected, that "at Edinburgh there is no academical distinction of dress, the student is placed under no restraints, *he attends no chapel, no hall*, no lecture even unless he pleases; even in the slippery period of early youth he is exposed to every temptation, and very often sinks to the lowest debauchery."

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Where there are many hundred young men assembled together, it is probable some may give loose to vicious habits; but the punctual attention at lectures, the sober and orderly behaviour of the students at Edinburgh is remarkable, and universally acknowledged. Are there no debauchees in the English universities? Is it not allowed, that half of the young men who enter them learn nothing, and forget the little they brought with them from school? Was not their lax discipline and deficient acquirement so notorious, so crying an evil, as within these few years to demand more strict examinations, and new regulations? Is not the chapel considered, in the language of Oxford, "a bore," where the young men cut their nails, and applaud the scholar who can get through the service soonest? Are Oxford graduates more regular than others in their attention on divine service, when they sit down to practise their profession? Are there no instances of general riot and insubordination there? Their discipline, we allow, is adapted to the education of priests, but not of physicians. Were it not invidious, we could point out as many instances of debauched and tippling M. Doctors of Oxford manufacture, notwithstanding the pure and celibate life their fellowships inculcate, as issue from the Scottish universities. When our "monk of Magdalen" calls our attention to the devotion of the public chapel, and temperance of the public hall, he forgets the riot of the coffee-house, and the dull and deep potations of the common room. Let our author be informed, that, though they are not subjected to the gloomy and monkish sequestration of the cloister, nor encumbered with the pomp of a distinguishing dress, they may have as much morality, as much learning, as much professional knowledge, as the members of English universities, and undergo a more severe test of the real acquirement of that knowledge before a degree is conferred, than any other university in Europe.

"The new improvements," says the immortal Gibbon, speaking of English universities, "so eagerly grasped by the competition of freedom, are admitted with slow and sullen reluctance into those proud corporations, above the fear of a rival, and below the confession of an error; we may scarcely hope that any reformation will be a voluntary act, and so deeply are they rooted in law and prejudice, that even the omnipotence of parliament would shrink from inquiry into the state of abuses of the two universities."—"The greater part of the professors," says Dr. Adam Smith, "have given up even the pretence of teaching, being secure in the enjoyment of a fixed stipend, without the necessity of labour, or the apprehension of controul." We agree with our author in some particulars, viz. the necessity of distinction of ranks, and division of labour in medicine, and the impropriety of blending, as the levelling reformers would, the several duties of physician, surgeon, and apothecary; the functions of each ought to be performed by distinct classes of individuals; and it is the interest of the profession and the public that they should be: but we should be sorry to see the sovereignty over medicine placed in the hands of the College of Physicians and English doctors, according to the plan proposed; which is, "that three fellows

lows of the College of Physicians shall form a *quorum*; or when three cannot be assembled, one fellow and two M.D.s of Oxford or Cambridge shall have the power of granting licences to practise; and none but English graduates be allowed to practise without them; that, north of the Tweed, and for the Colonies, Edinburgh and Glasgow grant licences to practise; that apothecaries be licenced and examined by members of the College or Society of Apothecaries, paying a licence fee proportionate to the population of their place of residence; that druggists be sub-licenced; that pharmaceutical poisons be laid under strict embargo, &c. &c. Of part of this plan we must approve; but, since the act of union between the two countries gives "a communication of rights, privileges, and advantages, which do belong to the subjects of either kingdom,"* we will not consent that that degree which gives, and always has given to those who are possessed of it, the privilege of practising or teaching medicine, "ubique gentium," shall submit to the regulation of the doctors of any other university.

Elements of Medical Jurisprudence; or a succinct and compendious Description of such Tokens in the Human Body as are requisite to determine the Judgment of a Coroner, and Courts of Law, in Cases of Divorce, Rape, Murder, &c. To which are added, Directions for preserving the Public Health. By SAMUEL FARR, M.D. 12mo. pp. 139. 1814.

THE title of this little volume sufficiently proclaims its object: and we hope its appearance may excite in the practitioner an attention to a most important and much-neglected study. Whether we look upon the science of medical jurisprudence in its connection with the actual practice of medicine, or as one of the accomplishments of medical education, without which it cannot be said to be complete; it will be found highly deserving of our regard; but in the former point of view alone, it is a duty imperative on the practitioner to make himself acquainted with it to its fullest extent. The physician or surgeon is often called upon to make depositions in courts of justice respecting the cause of death under particular circumstances: should he err on one side, the existence of a fellow-creature may be forfeited through his ignorance; by a mistake on the other, the guilty may be absolved, and the purposes of justice defeated. How mortifying the situation of the practitioner, who, called as a witness on a trial, is unable to explain what is required of him, or delivers his evidence contrary to the dictates of science! Exposed to the buffetings of hostile counsel, his stupidity is soon brought to light; he retires an object of derision with the whole court, with a stain upon his character that the grave will scarcely efface! Setting aside, however, the personal interest we have in an intimate acquaintance with this science, can no case arise in which life may be endangered

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* See fourth article of the Act of Union between England and Scotland.

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by our ignorance of it? We fear many such instances could be found: one occurred within our own recollection, where an individual narrowly escaped being hanged upon the testimony of *several* medical men of eminence in Liverpool; and certainly would have paid the forfeit of his life, had it not been for the providential and unexpected interference of Dr. Carson, of the same place.

As no arguments we can adduce can have so much weight as this solitary fact, we shall call the attention of our readers to the particulars of the case; to which we shall subjoin another, which occurred in our own private practice, which strikingly proves the correctness of Dr. Carson's reasoning upon this subject.

A Mr. Angus, of Liverpool, was indicted for the murder of Miss Burns, a young woman with whom he lived in habits of stricter intimacy than prudence or modesty could justify. She became pregnant, miscarried, and died in a few days. The concealment of the delivery, and subsequent death, induced a suspicion that abortion had been produced by means of poison: and unhappily, on examining the body, *an opening or supposed ulceration was discovered in the posterior part of the stomach*, which was pronounced by gentlemen of eminence to be capable of explanation in no way but on the supposition of poison having been administered. Marks of inflammation were seen on the peritoneum, small intestines, *and also on the peritoneal covering of the uterus;* which last, being of the size of a bullock's heart, left no doubt of the very recent delivery of the deceased. By some unlucky fatality, the inflammation of the uterus excited no suspicion that all the mischiefs which terminated in death had there begun; upon the evidence of these gentlemen the unfortunate man was committed to goal, on suspicion of being the perpetrator of this atrocious deed; and, after an imprisonment of six months, was arraigned for the murder. When the trial came on, it should be mentioned, to the honour of Dr. Carson, that he alone stood forward and maintained, in opposition to his brethren, that the appearance of the stomach could be accounted for by the known fact of the occasional digestion of that viscus by the action of the gastric juice after death. And to this conflicting testimony of men of equal reputation, Mr. Angus was indebted for the preservation of his existence.

We should be sorry that any remarks of ours could merit the imputation of personality; but we are constrained to observe, that the evidence, levelled at this unfortunate man's life, was given in opposition to facts which ought to have been notorious to every one. If the instances of digested stomach, related by John Hunter,* were in the estimation of these mistaken witnesses not sufficiently analogous with the appearances of that viscus in the case of Miss Burns to warrant the entire exculpation of the prisoner, in a matter of such serious importance, the *great* uncertainty of all medical reasoning should have induced them to *admit that uncertainty* in giving their testi-

* This subject has been admirably illustrated by Dr. Adams, in his Essay on Morbid Poisons.

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mony against him. Each party used Mr. Hunter's words to prove the fallacy of the other's reasoning; but neither seemed perfectly to understand him. Dr. Carson, by continually keeping alive the question concerning the stomach, contrived to keep that of the uterus out of sight. But his opponents were so little prepared for his objections, that they never could rally with sufficient firmness to direct the whole attention of the court to the state of the uterus.*

Without examining the question of the prisoner's criminality in having procured the abortion, we cannot entertain a doubt that the supposed ulceration of the stomach could not have been produced by the direct action of poison. If from future observation a connexion between inflammation of the abdominal viscera and the digested state of the stomach be shewn to exist, it may then become a consideration whether the inflammatory symptoms were produced by the operation of poison, or the delivery itself, under all the disadvantages attendant on its concealment. That the ulceration was quite independent of poison, we think will be satisfactorily proved by the following case.†

Thyrsa Binden, aged twenty-six, residing at No. 43, Great St. Andrew-street, was delivered of a male child, after a natural labour of six hours. Until the fifth day of her confinement she was as well as under ordinary circumstances, when she began to complain of pains in the abdomen. A neighbouring apothecary was employed, who considered the symptoms to be common colic; but thought so lightly of them, that he merely ordered a common fomentation, and gave a powder, supposed to be an antimonial preparation. On the third day from this attack, the pains having increased to an insupportable degree, another apothecary was sent for, who recommended an accoucheur to be consulted, when Mr. Clarke was called in, who ordered a large quantity of blood to be drawn from the arm. It was immediately done. In the evening the symptoms were evidently increasing, though at first relieved by the bleeding. We were now sent for. She complained of the most excruciating pain of the abdomen, with inability to sit in an erect posture. The surface of the body was so exquisitely tender, that the slightest pressure could not be borne, nor could she move herself without the most alarming increase of her sufferings. Her skin was hot, she had intense thirst, the pulse was full, quick, and undulating, and the tongue was covered with a whitish fur. She had taken a solution of sulphate of magnesia in mint-water, which had procured the necessary evacuations from the bowels.

Here was no time to be lost; and, well knowing the liberality of our predecessor, Mr. Clarke, we ventured to wave the etiquette of the profession, which made it proper for us to consult with him, previous to prescribing in this case. Thirty ounces of blood were or-

* For a most important investigation of this case, see our 21st volume, page 336.

† Mr. Want thinks it proper to acknowledge himself to be the writer of this article, that the public may judge how far the authenticity of the case may be relied on.

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dered to be taken, and the abdomen to be kept constantly wet with cloths dipped in vinegar and water. No internal medicine was administered. In the early part of the night she was relieved; the lotion appeared to be serviceable while applied, but, from an unlucky though natural fear of checking the discharges which are peculiar to the puerperal state, they were laid aside, and no permanent benefit was experienced. The symptoms recurred in the night with their usual violence: on the following morning the bleeding was repeated, and the nurse being convinced of the necessity of reapplying the lotion, it was done. About noon she was evidently relieved. Mr. Clarke met us in consultation, and it was agreed to continue our present plan. In the evening she was free from pain; the lotion had been kept constantly applied; she spoke of it as being peculiarly grateful to her, and believed it in a great degree to have been instrumental in procuring the ease she experienced. She was now sanguine in her expectations of recovery; but there was a fixedness and anxiety in her countenance which left us little to hope. The breathing became so laborious as to render it necessary to support her in an erect position by pillows. In the morning the pulse became weaker; convulsive twitches of the tendons supervened; she was evidently sinking, and in the evening she died.

It should have been remarked, that no vomiting had taken place during any part of her illness. With some little difficulty we obtained permission to inspect the body after death. On dissection, marks of high inflammation were evident in the peritoneum and the external coats of the intestines, which were slightly connected together by a gelatinous substance, but were easily separable; the surface of the intestines was covered by pus, a large quantity of which was found in flakes floating in about a pint of fluid effused into the cavity of the abdomen; water was found in the chest and pericardium; but the appearances most important for our purpose, were those which presented themselves in the stomach: *the posterior part of that viscus was completely eroded, and the contents effused into the abdomen immediately behind it.* Patches of inflammation were also found both on its internal and external surfaces. The uterus was inflamed, and had not yet contracted to its natural size.

The slightest comparison of this case with that of Miss Burns, as related in evidence upon the trial, will abundantly satisfy the reader of their being as similar as two cases in different constitutions of body can well be supposed to be; both young women, dying within a few days after delivery, with symptoms of peritoneal inflammation, and both with *digested stomachs after death.**

In one respect only they differ, in our case, which was open to the inspection of the whole world, no possible suspicion of poison could

* These may be regarded as very important facts in pathology, and may lead us more closely to investigate the seeming connection between the inflammatory symptoms and the state of the stomach. But we dare not dwell upon this, as it is foreign to our present subject.

exist. In the other, probably the concealment of the delivery gave rise to the suspicion. Let us hence learn the danger of stepping aside from the abstract question presented to our decision, with the hope of obtaining assistance from collateral evidence, which is at best to be suspected, and certainly ought never to influence the judgment of the practitioner.

With regard to the merit of the publication before us, although it is calculated to impart much instruction to the uninformed reader, we cannot allow it to possess that degree of perfection which the present state of science would entitle us to expect; in many places it contains sentiments evidently erroneous, especially where the grounds of divorce are discussed; and the important question of the digestion of the stomach is left entirely unnoticed. We are happy to be enabled to add, that some recent arrangements at the Windmill-street Theatre may be the means of directing the attention of students in medicine to the study of this interesting science, as Dr. Richard Harrison has announced his intention of delivering a full course of lectures upon it.

The contents of this Epitome are arranged under nine heads:—Pregnancy—Parturition—Divorces—Rape—Murder of Infants—Homicide—Idiotism and Insanity—Impostors—Means of preserving Public Health. As the work is in itself much condensed, and scarcely capable of abbreviation, we shall, for the purpose of shewing the nature of its execution, make some selections from three of these chapters.

"When the word parturition relates to the child itself, it may denote the time when it is born, the conformation of its parts, or the external figure which it presents, the state of its life, and the number which are brought into the world.

"When it relates to the time in which it is born, it may be considered either as perfect or mature, or immature and imperfect. The former, when gestation has been carried on at least nine months: the latter, when it is completed before that time; and in this last case, another division may be made into abortions, where the delivery is made before the seventh month; and premature births, where the child is born between the seventh and the end of the ninth. To this head also belong too late deliveries.

"The signs of an immature child are taken from the following particulars:

"1st. From its length, for, if it be not one foot long, we may be nearly certain that it is not completely formed.

"2d. From its weight, which should exceed five pounds.

"3d. From the figure of the head, &c. An incomplete child has a deformed face resembling an old person, with a wide mouth and slender ears like membranes; its eyes are shut; the hair of its head is of a whitish cast; the division between the bones of the skull, called the rhomfoidal suture, gapes wide; the bones themselves are moveable; and the lips of the mouth resemble pieces of bloody flesh.

"4th.

"4th. From its habit of body, which is for the most part thin and tender, and covered with a short down, and is of a reddish hue, particularly on the extremities and the face. If it be a male, the scrotum is of a round figure, and the testicles are not contained in it.

"5th. From its limbs, which are thin and weak, and the nails upon its fingers are soft, short, not extending beyond the fingers; nay, if it be very small, as of one or two months, the nails are by no means perceptible either upon the fingers or the toes.

"6th. From the conformation or constitution of its bones; for it is evident from experience, that in every month of gestation there is some alteration in this respect; ex. gr. in a fœtus of five months, the orbits of the eyes are entirely formed into bony sockets; and in one of seven months, the small bones, subservient to the organ of hearing are so perfect, as scarcely to differ from those of a complete child.

"7th. From the umbilical cord, which is very slender.

"6th. From other curious circumstances which attend this little embryo, such as a constant indulgence in sleep, an abstaining from crying, an intolerance of cold, an indisposition to suck, or to use its limbs, or the muscles of other parts, such as those which are subservient to the evacuation of urine, or the depositing of the meconium.

"The signs by which we distinguish a perfect child are taken,

"1st. From its size; its length being at least one foot six inches.

"2d. From its weight, which should be at least six pounds.

"3d. From the formation of its bones, which is known only by experience. But in general, a child can hardly be called complete, all whose bones, and every part are not entirely formed, though age may give some addition to their substance.

"4th. From the umbilical cord, which is thick and firm.

"5th. From other circumstances, opposite to those in that which was imperfect; such as that he cries, moves his limbs, opens his eyes, sucks at the breast, is not always asleep, can bear cold, has a white skin, can evacuate urine and the fæces, has long nails, and his head covered with hair.

"That which relates to the conformation of a child, after it is brought into the world, is distinguished into monstrous and not monstrous: the former including all deviations from the ordinary figure of man. Monsters are again divided into perfect and imperfect. A perfect monster is that which absolutely differs in all its parts, from the human appearance, as when it resembles any brute animals, as a dog, an ape, &c. An imperfect monster is where only a partial alteration is made in its figure; and this may again differ, according as this partial alteration is made in the head or other parts; and this as it may be born without a head, or with the head of a beast, &c. Where a monster differs from a complete child, in other parts besides the head, it is distinguished into two sorts, as any parts in general are affected, or as more particularly the change is wrought in the genitals only, and then it is called an hermaphrodite, which is likewise perfect or imperfect.

"In an enquiry into the nature of monsters in general, three objects of consideration present themselves. 1st. What is the cause of monsters? 2d. Whether are they possessed of life? 3d. Whether a perfect monster can be considered as a human being?

"1st. The cause of mousters is various, as depending on such changes in the constitution of the mother as can hardly be accounted for.

"Whatever view we take of the theory of generation, whether a germen be formed in the ovarium of the female, which is only impregnated by the semen of the male, or whether the homunculus is contained in that semen, and the female affords a nidus for its formation; still we see a strong resemblance to both parents in their offspring: and accidents, or other causes, contribute to make an entire alteration in the form of the fœtus, and produce monsters. We will not suppose unnatural connections, or that any impregnations can arise from that source; but imagination has a great power over the body of a female, especially during gestation; and the fluid in which the fœtus swims, or the womb itself may be disordered, so as to occasion great changes. Neither need we have recourse to the theory of the ingenious Buffon to explain how these are brought about; or suppose that every part of the human body has a representation in the fecundating quality of both parents, to form its construction. The first rudiments or germen of the human body is not a human creature, if it be even a living one; it is a foundation only upon which the human superstructure is raised. This is evident to anatomical observation. Were a child to be born of the shape which it presents in its first stages of pregnancy, it would be a monster indeed, as great as any which was ever brought to light. How easy then is it for disorder to prevent the exertion of that plastic force, which is necessary to form a complete animal.

"2d. Monsters may live, but it depends on what parts are affected, how long life shall be continued to them. Where the monstrous parts are confined to the extremities, or even to those places which distinguish hermaphrodites, we find from experience, that the vital powers are strong and vigorous; and were it not that such beings often fly from society, lead sedentary lives, and are deprived of some wholesome exercises to the human constitution, life might be enjoyed by them, and to as great an extent as by any other persons.

"3d. With regard to perfect monsters, most of the authorities which assert that any thing of that kind can exist, seem to be of no credit. But should any ever appear, we should consider that it is not form or shape, but reason and intelligence, which distinguish human creatures from brute animals.

"We are next to consider the nature of hermaphrodites; and as these are living beings, and sometimes capable of all the functions of society, such distinctions ought to be made relating to them, as will place their situation in the most proper light, and the most favourable to their happiness. They are great objects of our pity and complacency; for they are not only deprived of the common pleasures of mankind, but are subject to disorders which are painful, uncomfortable,

fortable, and inconvenient. A perfect hermaphrodite, or a being partaking of the distinguishing marks of both sexes, with a power of enjoyment from each, is not believed by any one ever to have existed. Imperfect hermaphrodites, or monsters, whose organs of generation are affected, are frequently presented to us. They may be divided, according to the sexes, into what are called androgynus, and androgyna. The first is the male, who has in general his own organs tolerably perfect, but has some division in the flesh above, below, on, or in the scrotum, which puts on the appearance of the female pudendum. The penis likewise may be so obliterated, as to give no external appearance of the male; but the beard, and the constitution of his body, confirm him to be of that sex. The androgyna is a woman, who has the parts of generation nearly like another, but at the same time the clitoris grows to a great size, and gives the form of the male penis. This is a very inconvenient disorder, as she is sometimes deprived of the pleasures peculiar to her sex, and suffers much from disorders of the part. From her breasts, and the deficiency of beard, however, she is distinguished from the male; though it frequently and unfortunately happens, that such women are more subject than others to robust and masculine constitutions. It is evident that the sexes here are as completely marked as in other persons, and, to all legal intents and purposes, they are man and woman.

"Some important enquiries may arise upon this subject. As, 1st. How far they are to be considered as impotent. This is, I believe, generally the case, but not always, and must depend upon proof. 2d. Whether they should be permitted to marry? This depends upon the former, but must, I should think, be left to their own choice. 3. Whether change of the sexes might be allowed? This is certainly contradicted in the terms, and will admit of no dispute.

"With regard to the state of life of a child, the following question remains to be decided: At what time may a fœtus be supposed to begin to live? To answer this, we must consider, that conception is made in the ovarium of a female after coition with a male, when the subtile aura of the semen hath so far penetrated into the germen, which may be supposed to contain the outline of the future man, as to produce a turgescence and motion of its circulating humours. At this time, it may be said, that life begins, i. e. immediately after conception. Hence those seem to err: 1st. Who would persuade us, that the fœtus acquires life when it is so particularly active, that the mother becomes sensible of its motions. 2d. Those who think that life does not begin till the seventh or fourteenth day, or even till a month after conception. And, 3d. Those who suppose that a fœtus, as long as it continues in the womb, where it does not breathe, cannot be called a living animal. The whole depends on our ideas of life and animation, and the act of generation to create it. If generation be the cause of animating the rudiments of the future being, and if that animation be construed to be understood by what is meant by life, then it must certainly begin immediately

diately after conception, and nothing but the arbitrary forms of human institutions can make it otherwise.

"On this occasion we may enquire, what part of the human body is the seat of animation, or the soul? To which we answer, that evidently it resides most conspicuously in the brain, because that substance being hurt, all the faculties of the soul become disordered; and because all the nerves of the body, which are the great instruments of action, are derived from it as a fountain. But it cannot be supposed that the whole of the brain is the immediate seat of the soul; it is probably confined to what is called the sensorium commune, or a small part from whence the nerves, destined to sense and voluntary motions, draw their origin; as they do likewise from an appendix to it, called the medulla oblongata.

"The next thing to be considered is, what kind of children, when born into the world, are to be deemed endued with life, or have a prospect of living; for a fœtus cannot live out of the womb of its mother.

"1st. Then, no abortion can be said to be endued with life, for if there be some signs of life when it is brought into the world, it cannot continue to live, for it can neither take the aliment which is necessary to its sustenance, nor, if it could take it, can it change such gross food into its tender nature. Some authors have asserted, that children of five or six months have lived; but this is probably a mistake; it being generally agreed, that infants so young cannot sustain the inclemencies to which they must be subject.

"2d. Children of seven months, or one hundred and eighty-two days after marriage, may live, though generally they are puny, and continue but a short time on earth.

"3d. All children above seven months are supposed to be endued with vital principles, and of consequence are allowed the privilege of life.

"The next subject of consideration is that of twins, suppositious births, and superfœtation.

"The right of primogeniture must be determined in natural births, by that which was first born into the world, and which must be decided by the by-standers. If the delivery, however, be made by a passage effected by art, the choice depending on the will of the surgeon, no proper determination can possibly be made.

"In the affair of suppositious births, two questions occur, according as the birth is performed or not. In the former case, a physician may judge, 1st. From those signs in the mother, which distinguish her having been delivered of a child. 2d. From those signs which refer to her incapacity of conception. 3d. From signs of impotency in the father. 4th. From the umbilical cord in the child not appearing as of one just delivered. Some persons look upon the dissimilitude to the parents to be a sign, but this must be very fallacious. Where the suppositious birth depends on the present state of pregnancy, either the proper signs must be examined, or we must wait the event, should those signs deceive us.

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"The impregnation of a woman already pregnant, is called a superfœtation. This is either true or false; the former is, when it happens in the womb itself; the latter, when one fœtus is deposited in the womb, the other in the ovarium, the fallopian tube, or the cavity of the abdomen.

"The following requisites are necessary to a superfœtation. 1st. The pregnant woman ought to bear two children, each of a distinct age. 2d. The delivery of these children should be at different times, at a considerable distance from each other. 3d. The woman must be pregnant and a nurse at the same time.

"There have been many doubts about the reality of the superfœtation, but there is no disputing of facts; for which see Graves on Superfœtation, Eisenman's Anatomical Tables, and the Leipsic Memoirs, 1725.

"How this superfœtation is accomplished, is a matter of enquiry, and depends in a great measure on the constitution, or rather the formation of the womb of the mother.

"The last thing to be considered under this head of parturition, is the legitimacy or illegality of births; and this is divided into the time when a child is born after conception, and the conformation of its body. With respect to time, physically considered, (for laws may be as arbitrary as they please in this respect) all abortions, too early births, children of nine months, and those who are late born, even to ten months, may be considered as legitimate in old marriages. Illegitimate with respect to the time of birth, are all perfect and mature children, who are born in the sixth or seventh month after the celebration of marriage; and all late births, when extended to the eleventh, twelfth, or thirteenth month, especially if the husband died of a chronic or lingering disease.

"There are many causes alleged to occasion a delay or prolongation of delivery, such as great care and anxiety; some severe diseases, as violent hæmorrhages, a phthisical disposition, &c. but these, one should imagine, would rather hasten than retard such a circumstance. Experience is the only guide we can follow in such cases, and, for the sake of humanity, the longest time that can be fairly proved, should be the standard to which we should refer.

"With respect to the conformation of the body, all children may be considered as legitimate, who are born at or after seven months; but all abortions are illegitimate. Monsters, likewise, are not to be excluded for any trifling alterations; but where all appearances of human nature are obliterated, it would be wrong to take advantage of such a birth.

"I. Idiotism is, 1st, either born with the subject of it, or appears as soon as the reasoning faculties should begin to expand.

"2d. It is established upon great defects of the memory, and much greater of the judgment, though this is not much attended to.

"3d. Idiots are in general prone to mischief, or to actions over which reason seems to have very little command.

"4th. They have not a proper command over the evacuation of fæces and urine, and drivel at the mouth.

"5th. They have generally strong and hearty constitutions.

"6th. They have a peculiar aspect, which describes a vacancy of thought and inattention to any engagement.

"7th. They have little use of speech, and articulate very incoherently.

"II. Insane persons are either furious or melancholic, both of which acknowledge a great imbecility of the mental faculties, and which are derived from hereditary constitutions, attention of mind, violent passions, the terrors of a false religion, immoderate use of venery, poisons of the narcotic kind, some preceding disorders, the suppression of evacuations, indigestible aliments, a sedentary life, &c. But they differ in the following particulars:

"1st. The furiously insane are naturally of angry and violent dispositions, in the prime of youth, and of a plethoric constitution, and tense fibre.

"2d. They lose all their natural delicacy of manners, and become furious, ungovernable, and are particularly affected by pride, anger, hatred, and revenge, and very often intemperate lust.

"3d. They refuse their food, and yet preserve their strength; they scarcely ever sleep, are continually shifting their ideas from one thing to another, bear the cold with incredible patience, and are not easily affected by medicine.

"4th. They have a peculiar look with their eyes, descriptive of violent anger, mixed with a glariness like that of drunken persons, their eye-lids are constantly vibrating, and their hands, and sometimes the whole body, they keep in motion.

"Melancholy persons are,

"1st. Naturally dull, slowly learning, and easily forgetting, and are sad and melancholy, of a phlegmatic temperament, and relaxed fibre.

"2d. When the disorder seizes them they become abject, fearful, fond of solitude, prone to anger, changeable in their opinions and desires, but fixing their attention upon a single object.

"3d. The belly is constipated, the urine is made in small quantities; the abdomen is distended with wind; a sharp acrid matter is discharged by vomiting; the pulse moves very slowly; the aliment is devoured with greediness; the imagination is perverted so, as that they are persuaded that they are made of glass, china, &c. and lastly, and worst of all, they are induced to put a period to their existence.

"4th. Their eyes have a dull, heavy, and stupid look; they seldom move, but continue in one posture a very long time."

Observations on those Diseases of Females which are attended by Discharges; by CHARLES MANSFIELD CLARKE, Member of the Royal College of Surgeons, &c. Longman and Co. 8vo. pp. 304.

(Concluded from p. 247.)

CARCINOMA UTERI.—Dr. Baillie, in his Morbid Anatomy, describes three states of the womb which have been discovered on dissection:

dissection: scirrhus enlargement, which seldom if ever ulcerates; the fleshy tubercle, and malignant ulcer of the uterus, which always begins at the cervix, and which is very fatal. The tumor which arises from the glandular cervix and the thickening of the cervix, are alone considered by Mr. Clarke to be cancer, and both are disposed to ulcerate.

Our author, with suitable modesty, gives Dr. Baillie the credit of first distinguishing the malignant ulcer of this part from cancer. But we must observe, that the merit is not due to Dr. Baillie, but his predecessors. The first edition of Morbid Anatomy confounded the two diseases. The subsequent ones not only corrected this error, but, with a candour worthy of the author, accompanied the correction with the following note: "This diseased change I formerly confounded with the scirrhus enlargement of the uterus, considering them as varieties of the same disease, and therefore blended their description together; but in consequence of the accurate observations of Dr. Adams, in his Essay on Morbid Poisons, I have thought it proper to separate them."—See Baillie's Morbid Anatomy, third edition, page 364, note.

We shall therefore direct our readers to the first edition of Adams on Morbid Poisons: here, we believe, for the first time, is to be found the distinction made by a modern author. But Dr. Adams does not assume the credit to himself. He acknowledges that he derived the information from Mr. Hunter's lectures and conversations; and draws a confirmation of its truth from a writer whose opinions must have been unknown to Mr. Hunter, on account of the language in which he wrote, inasmuch as he has not been attended to by any modern author.

"There is an ulceration of the os uteri of a distinct kind from that just mentioned, although equally fatal. This will be described in a future part of this work, under the head of purulent discharges, by the name of the corroding ulcer of the os uteri.

"The cases described by Dr. Baillie under the title of Scirrhus Uteri and Tubercle of the Uterus, the author means to consider together, under that of the Fleshy Tubercle of the Uterus; for the uterus in both has tubercles, either arising from its surface externally or internally, or imbedded in its substance. In both, few except mechanical symptoms, are present: in neither does ulceration take place. In both, the tubercles are found at a distance from the cervix of the uterus, and both sometimes continue for many years without producing much inconvenience."

It is essential to remark, that mere induration and enlargement of the body of the womb are insufficient to characterise cancer of that viscus. The seat of this disease is mostly, *if not always*, in the cervix.* "On

* "Etsi cancer etiam ipsi uteri substantiæ accidere potest, tamen hoc rarius accidit, et vix tum satis cognoscitur, multo minus curatur; frequenter vero in cervice uteri generatur, quâpropter hoc loco

"On examination this part will be found thickened, and, with a resisting feel resembling that of gristle, or a distinct tumour, will be perceived arising from some part of the cervix uteri, the other parts remaining healthy. In either case, pressure upon the diseased parts produces pain of a lancinating kind.

"The os uteri will be found also to have undergone a change. It becomes larger than natural, still however retaining its original shape. This open or gaping state of the os uteri sometimes is sufficient to admit the extremity of a finger, which, when introduced into it, feels as if surrounded by a firm ring. The parts will sometimes have undergone all the changes of structure above related when no local symptoms have been apparent, and when the disease has only been ascertained by an examination, suggested by the failure of remedies in relieving the supposed disease of the stomach or kidney."

"When carcinomatous tumours are cut through with a knife, they offer a good deal of resistance, and appear sometimes as hard as cartilage. The cut surface presents an appearance of white lines, which run pretty regularly with regard to each other, but the directions of which vary according to the shape of the tumour."*

The fleshy tubercle of the uterus is said to be situated in the body of the uterus, and never ulcerates.

"Two varieties of cancer are observed in early stages:

"1. There is a firm tumour, of a rounded form, springing from the surface of the cervix uteri, or imbedded in it, whilst the other parts of the uterus are perfectly healthy, except that its parieties are thickened as the disease advances, and that its cavity becomes larger than that of an healthy unimpregnated uterus.

"2. Instead of any distinct tumour, the whole of the cervix of the uterus becomes larger and harder; and, if this thickened part is examined by cutting into it, it puts on the same appearance which a regular carcinomatous tumour possesses.

"The two cases proceed differently. In addition to the usual symptoms of carcinoma, there will sometimes be found in the first variety of the disease some mechanical symptoms, depending on the pressure made by the tumour upon the neighbouring parts; which symptoms will be more or less severe, according to the size and situation of the tumour itself.

"In the second variety of the disease these symptoms do not exist; because the carcinomatous thickening of the cervix uteri rarely acquires a sufficient size to produce them.

"There is reason to believe that carcinomatous tumours make a very rapid progress when any violence has been done to them, as the following case will show. A woman, about the age of forty, fell into labour: the head of the child presented; and, little progress

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de eo agemus: Isque nunc est sine ulcere, nunc exulceratus."—Sennertus, lib. iv. de Morbis Mulierum, cap. 11.

* "Vide Dr. Baillie's Morbid Anatomy."

being

being made, a consultation was thought necessary, and the author was desired to see her. Upon examination, the os uteri was found dilated to the size of a half-crown, the cervix of the uterus was greatly thickened in every part, and felt like cartilage; it was also very tender. Upon inquiry, it appeared that the woman had been liable, during the latter part of her pregnancy, to a profuse discharge of mucus, and to occasional attacks of pain in the lower part of the abdomen. Two days elapsed before the os uteri was completely dilated, and the dilatation was performed with greater pain than usual. The head of the child at length passed through it. After the labour, the pain and discharge were greatly increased, and the woman died in a few days. Upon examining the cavity of the abdomen after death, the body of the uterus was found contracted as much as it generally is at the same period of time after delivery; but the cervix was very much thickened, and had begun to ulcerate. The parts are preserved in the collection of the author. It is to be presumed, that the disease formed after the commencement of the pregnancy, and that it became more active in consequence of the violence done to it in labour. Comparing this case with others in the progress of which occasional examinations are made, it is probable that it must have proceeded with great rapidity.

"A mucous discharge from the vagina is a very constant attendant upon the complaint; and, by the local evacuation, it in some measure checks the progress of it.

"This mucous discharge is sometimes tinged with blood, and particularly when the patient indulges in eating and drinking, or where the food taken has been of a stimulating quality. If the woman uses much exercise, pure blood sometimes comes away, and in such large quantity as to produce great weakness, and occasionally fainting. Generally whilst there are discharges of blood in moderate quantity, the tumour remains almost stationary, increasing little in size, and producing little or no uneasiness. The author has seen many instances of women with a diseased uterus attended by distressing symptoms, who, after having been attacked by large bloody discharges, so as to make them faint, in any other than the horizontal posture, and to bring on general anasarca, have continued free from every symptom of the specific disease for many months. In some instances where the woman has died, it has been from weakness and the dropsical symptoms, and not from the symptoms belonging to the original disease. This is the reason why many cases of menorrhagia ending in dropsy are unmanageable; because they depend upon organic disease of the uterus, which is never perhaps known, or, if known, baffles the art of medicine.

"In carcinoma uteri, if menstruation has not ceased, it becomes for the most part irregular, and is more profuse than it ought to be.

"The mechanical symptoms produced by tumours in the pelvis sometimes attend carcinoma; but the patient seldom suffers much from them, since the size of the carcinomatous tumour is not often great enough to cause them. Œdema of the lower extremities sometimes attends; but this is not generally the effect of pressure

upon the trunks of the absorbents; for it does not appear until the frame has been much weakened by the long continuance of the disease, and the disposition to anasarca is general.

"Difficulty of passing urine rarely occurs in this complaint; but strangury, arising from the consent between the uterus and the bladder, is seldom wanting. In some instances it accompanies the disease from the beginning, but in others it ushers in the symptoms which immediately precede the conversion of the disease into the state of ulceration.

"The inner membrane of the bladder is found to secrete, in some cases, a larger quantity of transparent mucus, which comes away with the urine, and falls to the bottom of the urinal.

"The seat and the course of the pain, resembling the passage of a calculus from the kidney to the bladder, have led to a mistaken idea of the disease; and in some instances the false opinion has been strengthened by another symptom which attends both diseases; namely, urticaria or nettlerash.

The treatment must be regulated according to circumstances. Our author has not forgotten the use of local blood-letting in cancerous affections, which, in this case, is better effected in the loins by cupping or leeches. The necessity of frequent ablution of the vagina with tepid water, mild aperients, and abstemiousness of diet, seems to be obvious. Urticaria, in this case, is considered as arising from the state of the stomach: the mode of relief must, therefore, consist in regulating the secretions of that viscus. Alkalies, with aromatic bitters, are the best remedies for this purpose. Preparations of iron have been recommended in cancerous complaints; but in those cases which have fallen under the care of the author, they have done more harm than good.

"Polypus Uteri.—The true character of this disease can only be ascertained by examination. This will discover an insensible tumour projecting through the os uteri, by which its neck is entirely encircled, so that the finger can be completely passed round it.

"The only diseases which can be mistaken for polypus are an inverted uterus, and the cauliflower excrescence of the os uteri. The history of the case from its commencement, and the insensibility of polypus, will distinguish it from the first: besides which, unless the uterus is only partially inverted, (a very rare occurrence,) the tumour will not be encircled by the os uteri. The irregularity of the surface of the cauliflower excrescence, the circumstance of its originating from the substance of the os uteri, with a broad base, and not coming through it, and the watery discharge which attends this disease, will prevent the practitioner from confounding it with polypus.

"There is, however, a tumour which has been looked upon and treated as polypus, which ought to be distinguished from it, on account of the prognostic to be given respecting its termination, and also because it does not admit of the same successful mode of treatment as polypus.

"This

"This disease consists of a tumour, which is insensible, which has an unequal ragged surface, which comes down from the cavity of the uterus into the vagina, surrounded by the os uteri, and without a narrow neck."

"The tumour which resembles polypus has been described by Levret and by Herbiniaux by the name of Vivace, although admitting of removal by the ligature, is disposed to return; other newly-formed irregular portions shooting down into the vagina, and this with a rapidity of growth not belonging to polypus."

There is, however, no objection to the ligature, but the success of the operation will be questionable. A mode of applying the ligature to these tumours may be found at the commencement of the present Number, which, in our opinion, is infinitely superior to any before employed.

"The FLESHY TUBERCLE is a hard whitish tumour, sometimes nearly as firm as cartilage, situated sometimes upon the surface of the uterus, between the muscular and the peritonæal coat, sometimes projecting into the cavity of the uterus, and occasionally imbedded in its substance.

"When it projects into the cavity of the uterus, its surface is smooth: the contrary is generally the case when it forms upon the outer surface of the uterus, the tumour having a granulated appearance. These tumours are sometimes not much larger than a pea; sometimes they weigh several pounds, and occupy a great part of the cavity of the abdomen.

"In general, when the tumour is large, the texture is less firm than when it is of a smaller size. It appears to be composed of distinct parts, connected by a close cellular membrane, the diseased tumour itself being opaque, and the connecting membrane more or less transparent. If coloured injection be thrown into the vessels of the uterus, so as to make the substance of the uterus quite red, none of it passes to the tumour of fleshy tubercle. In the collection of Mr. Abernethy, assistant-surgeon to St. Bartholomew's Hospital, there is a very good preparation showing this fact."

These tumours are situated at a distance from the cervix uteri, and have sometimes been mistaken for hydrops ovarii, and pregnancy. They neither suppurate nor ulcerate: the surrounding parts may, but the tubercle remains the same.

In the 18th and 19th Chapters, the author describes warts, and the vascular tumour of the orifice of the meatus urinarius, upon neither of which we feel it necessary to detain our readers.

"*A Thickening of the Cellular Membrane surrounding the Urethra throughout its whole extent, accompanied by a varicose State of the Vessels of the Part.*—On examination, a bulbous tumour will be found situated behind the pubis; and if much pressure is made upon it, pain will be produced, but not of a severe kind.

"A mucous discharge always attends this disease, secreted probably in part by the membrane of the urethra, and in part by that which lines the vagina.

"If

"If the parts are exposed, and the patient presses down, the diseased part will be brought into view, putting on the appearance of a tumour, but which is nothing else than a thickening of the urinary passage. On the surface of this thickened part blood-vessels ramify, of a size large enough to admit of being opened by the point of a lancet.

"When the patient is in an erect posture, the size of these vessels increases, and she complains of a sense of fulness in the parts: when she lies down, the vessels carry less blood, and the sensation of fulness is diminished. If pressure is made upon the part, the swelling and redness subside for a time, but both return directly upon the pressure being discontinued. Sometimes a pouch forms in the posterior part of the urethra, in which a few drops of urine lodge, and from which situation it may be pressed out by a finger applied to the part. If a catheter is introduced into the urethra, it may be carried backwards to the part where this lodgement of urine is found. Upon this cause depends, perhaps, one of the most troublesome symptoms of the disease,—a frequent desire to make water, both in the night and during the day, so as to interfere with the patient's rest.

"The disease seems to consist of an enlargement of the blood-vessels of the part; because, when the vessels are emptied of their contents, the size of the tumour diminishes. Judging from the colour of the tumour, there is reason to believe that the enlarged vessels are principally veins.

"The most speedy and effectual mode of relieving the patient is by emptying the vessels, either by puncturing them with a lancet, or by the application of leeches: either may be employed, according to circumstances. The size of the vessels and of the whole tumour will be diminished by these means, and its colour will be changed from a deep red to the proper colour of the part.

"The fulness of the vessels being removed, lotions composed of solutions of lead may be applied cold to the parts, and these should be changed as often as they become warm. After a day or two, weak solutions of muriate of ammonia or of sulphate of zinc may be used: at first, the openings made by the leeches or the lancet would be inflamed by them. Pressure is serviceable, and may be applied either by introducing a piece of wax candle, or a small roll of linen which may be previously dipped in the lotion."

The two remaining chapters are on "*the transparent Mucous Discharge from the Vagina, not accompanied by any alteration of Structure of the Sexual Organs*," and the "*Case of transparent Mucous Discharge depending on Debility;*" but which, as they are more generally known, and their treatment understood, it is unnecessary for us to notice. We cannot take leave of this interesting performance without expressing our sincere hope that the promised continuation of the subject may not long be withheld from the public.

MEDICAL

MEDICAL AND PHILOSOPHICAL INTELLIGENCE.

Our readers will recollect the experiments of M. LECHENAULT on the deleterious effects of the juice known at Java by the name of *upas*, when introduced into wounds, as well as those of Messrs. DELILLE and MAJENDIE, which tend to prove that it is essentially on the spinal marrow that this poison acts.

Having been frequently witnesses of the frightful rapidity of its action, Messrs. Delille and Magendie were tempted to doubt that it could have been transported so quickly into the marrow by the tortuous and intricate way of the lymphatics; and they inquired if we ought not to admit, at least in certain cases, the absorbent faculty generally ascribed to the veins when we were not so well acquainted with all the ramifications of the lymphatic system. In order to come to some conclusion in this respect, they applied the upas to parts which adhered to the animal body by blood-vessels only: for example, they cut off all the mesentery adhering to the intestine of a goose, leaving only the arteries and veins; and after having placed the upas in the interior of this goose, they cut it, and tied both ends: nay, what appears still more conclusive, they cut a thigh, leaving the vein and artery only entire, and afterwards applied poison to the foot: finally, in order to remove even the objection of invisible lymphatic vessels, which might have belonged to the texture of these two blood-vessels, they removed a segment of both, after having supplied their place with quills, so that there was no longer any communication between the member and the animal, than by the blood which circulated from the one to the other. In all the experiments, convulsions and death came on as promptly as if the upas had been applied to the entire animal. Some, however, will still object, perhaps, that when the upas was introduced into the intestine, it might always be supposed that there remained some concealed lymphatic vessel; that, when it was applied to the foot, it was inserted into a wound, from which it could penetrate into the blood by open veins and arteries; and that this is by no means what is meant when we admit the venous absorption, for in that case we mean an action attributed to the veins in their natural state, and by their organic pores. What is still more remarkable in the experiments of Messrs. Magendie and Delille, is that the blood of an animal already poisoned, and ready to die, when transfused into the veins of another animal, does not kill the latter, and scarcely occasions to it any inconvenience.

M. Magendie has made another very interesting application of this action of certain substances, when introduced into the blood.

We know that an emetic injected into the veins of an animal makes it vomit in a few minutes, whilst it requires a whole hour when an emetic is swallowed to produce the same effect: and we instantly conclude, that this convulsive movement does not depend on the immediate action of this remedy on the coats of the stomach,

Observation,

Observations made on the viscus itself, during the operation of vomiting, have led some physiologists still further. They perceived that the coats of the stomach underwent very little agitation; and hence they concluded also, that it is not in the irritation of these coats that the immediate cause resides of the expulsion of the contents of the stomach. Their opinions, however, were but feebly supported, and have almost fallen into oblivion since Lieutaud and Haller introduced one directly contrary.

M. Magendie, wishing to ascertain the truth, employed the convenient method of injections: and, having first made an opening in the abdomen, he ascertained by the touch, that during vomiting the stomach itself remains in a state of inertia, but that at every successive retching it is violently compressed by the contraction of the diaphragm and the muscles of the lower belly: besides, the long inspirations which precede every vomit, introduce a sufficiency of air into the stomach to prevent its capacity from diminishing, notwithstanding the quantity of matter which it ejects. If we open the abdomen wide enough to let out the stomach, the nauseæ continue; but they become impotent, because the muscles no longer compress the viscus: when we replace the stomach, the vomiting immediately begins. Compression is not sufficient of itself, however; for, if we compress with our hands a stomach displaced as above in a dog into whose veins no emetic has been injected, we can very well expel its contents without producing thereby a true vomiting, because there are neither nauseæ nor inspirations attending this kind of convulsion: but, if we pull the stomach instead of compressing it, and if we extend the pulling to the œsophagus, the nausea and all the other symptoms of vomiting appear, without there being any occasion for an emetic. Thus, vomiting would result from the compression exercised on the stomach by a convulsive contraction of the muscles which surround the belly; and this contraction itself may be excited by an irritation of the œsophagus.

It being of importance to know what muscles chiefly acted, what nerves put them in motion, and by what causes they were irritated, M. Magendie in the first place cut or removed the abdominal muscles, without much diminishing the activity of the vomiting: on the contrary, when we take from the diaphragm a great part of its strength by the section of the phrenic nerves, there are nothing but small retchings at long intervals, and the vomiting rarely takes place, notwithstanding the abdominal contractions. Thus, the part acted by the diaphragm in this compression is by far the greatest. When we thus destroy at once the action of the diaphragm and that of the muscles, the vomiting no longer takes place, even if we make the animal swallow substances eminently and promptly emetic, such as corrosive sublimate. Finally, M. Magendie entirely removed the stomach: he substituted for it a bladder, which he attached permanently to the base of the œsophagus, by making it communicate with this conduit by a solid tube; and after again sewing up the abdomen, he injected some emetic into the veins: the animal had nauseæ, made inspirations, and ejected a coloured liquid, (with

which the bladder had been partly filled,) quite as well as it could have done, if, with a natural stomach, an emetic had been administered in the common way.

Thus, an emetic does not cause vomiting by irritating the fibres of the stomach, nor even the nerves, but by acting by means of absorption and circulation on the nervous system, and by exciting an action which is reflected specifically on the œsophagus and diaphragm, so as to make them exert various movements, among which there are some, the definitive result of which is the compression of the stomach: this does not prevent there being vomitings produced by the immediate irritation of the nerves of some of these parts, or by any given nervous irritation which would be propagated so as to affect the system nearly like an emetic.

It remains to M. Magendie to distinguish with more precision the part acted by the œsophagus and the diaphragm in the act of vomiting, and to examine the phenomena of this movement in birds and other animals which have no diaphragm.

To these experiments with antimony considered physiologically, M. Magendie added some others upon its medical or deleterious action; and he ascertained by many observations made upon human beings, and by several experiments upon animals, that the tartrite of this metal, taken in large doses, is of itself a deadly poison; but that almost always its first effect is a vomiting, which rejects the greater part before any mischief has been done: in this way many suicides are disappointed in their melancholy intentions.—*Phil. Mag.*

A case of *locked jaw* has lately occurred under the care of Dr. PHILLIPS of Andover, in which the most decided good effects were supposed to be produced by the *Ol. Terebinth.* given as a clyster. The case will be published.

Dr. BABAD, a physician at Roanne, lately read before the Medical Society at Paris, an account of the propriety of bleeding in intermittents. He commenced by stating the case of a plethoric young man, who had a quartan intermitting fever, which gave way, after the fifth accession of fever, to an emetic which was given on the third day, and a few doses of bark. Two weeks after he had a relapse of fever with the same type. At the fifth accession of fever, he had considerable pain, a strong full pulse, flushed face, his eyes prominent, pain and heaviness in the head; his ideas were confused, and his speech incoherent, with a strong feeling of suffocation. These symptoms determined Dr. Babad to bleed immediately, which produced syncope, and an involuntary motion. When he recovered from the syncope, the paroxysm had left him: bark was prescribed, but the fever did not return. The same man was attacked the following year with the intermittent, having analogous symptoms, but less intense, which bleeding immediately cured. M. Babad had also to congratulate himself on the happy termination of another case, from the use of the lancet. He concludes his cases with observing, that the symptoms which indicate bleeding in intermitting fevers,

are, 1st, a sanguineous temperament, and plethoric habit; 2nd, a habitude of hæmorrhages and their suppression; 3rd, a fullness and hardness of the pulse; 4th, a sense of suffocation, difficulty of breathing, and strong beating of the heart; 5th, a tendency to apoplexy, which is characterised by the redness of the face, starting of the eyes, and pulsation of the temporal arteries.

Incontinence of urine is said to have been removed in a variety of cases by M. MONGERET, by the repeated application of Moxa on the sacrum. A report was made to the National Institute of seventeen cases, in which this remedy was completely successful.—*Gazette de Santé.*

M. MARSAN, professor of medicine at Padua, has drawn up a memoir upon a plant, more resembling the sugar-cane in its botanical characters, and in the quantity and quality of the sugar which it yields, than any hitherto discovered. It is a large gramineous plant from the South of Africa, described for the first time in 1775 by Peter Arduino, under the name of *holcus cafer*, and well characterised by its velvet down and globular seeds. It is now cultivating in various parts of Italy, Bavaria, and Hungary.

Indigenous coffee seems hitherto to have been less easily obtained in Europe than sugar: the torrefaction of many seeds and roots has been attempted with a view to procure substitutes, but the liquor produced by them had nothing of true coffee but its blackness and bitterness.

M. LEVRAT, a physician at Chatillon sur Chalaronne, thinks that the seed of the yellow water flag of our marshes *(iris pseudacorus)* is that which most approaches the coffee berry: after drying it by heat, and freeing it from the friable shell which envelopes it, it is then torrefied, and infused like coffee.

M. ORFILA, a young Spanish physician, has presented to the Institute an extensive work on poisons, considered with respect to medicine and medical jurisprudence. We have only perused the first volume, which treats of the poisons of mercury, arsenic, antimony, and copper. The author has detailed many experiments on the differences which the presence of various aliments acting as reagents, occasion in the operation of poisons, differences which may, in certain cases, disguise their properties, and prevent us from ascertaining them. He has pointed out all the precautions necessary for coroners, lawyers, and medical men, when the ends of justice are to be attained. He has particularly endeavoured, with the greatest care, to verify all the known methods of arresting the deleterious effects of these poisons, and to find new remedies where the old have failed. Thus, according to M. Orfila, the only antidote against corrosive sublimate is albumen or white of eggs diluted in water; and against verdigrese, common lump sugar, a result to which theory never would have led us.

M. MONTEGRE, a physician at Paris, has made some curious observations on the habitudes of the *lumbrici* or earth-worms, and some new remarks on their anatomy. These animals are hermaphrodites, each being productive of young: nevertheless, there is no copula, or this seems to take place without any intromission of parts, and merely by the excitement of the movements necessary for fecundation. This takes place chiefly in June and July. The worms unite by means of a swelling at the anterior part of their body, and by which they adhere firmly to each other. The young worms first show themselves in white organs placed in front, on both sides of the stomach, and slide between the intestines and external muscles along a reservoir situated in the thick part of the tail, where they are found full of life. The *lumbrici* exhibited nothing to our observer which could induce him to ascribe to them the faculty of being affected by light or sound; but he was convinced that they did not confine themselves to the earth alone, for he found in their intestines the remains of animals and plants.—*Phil. Mag.*

New Acid.—GAY-LUSSAC has finished a very laborious and complete investigation of the properties of *iodine*. During his experiments he discovered that chlorine has the property of combining in two proportions with oxygen, and of forming two acids, which he calls the *chloric* and *chlorous* acids. The euchlorine of Davy is Gay-Lussac's chlorous acid; but it would seem that the chloric acid is the more curious and important compound.—*Dr. Thomson's Annals.*

Agent for the Vaccine Disease.—The government of the United States have authorized the appointment of an agent to preserve genuine vaccine fluid and furnish it to the citizens of the U. S. To facilitate his communications they have allowed him the immunity of the post-office. Dr. James Smith, of Baltimore, has been appointed agent, and has issued proposals for supplying the fluid, and determining, by inspection of the scab, whether the disease has been genuine.—*New England Journal.*

The practice of the London Infirmary for Diseases of the Eye, in Charter-house Square, under the medical superintendance of Dr. Farre and Messrs. Travers and Laurence, is open to students on the following terms:—For three months, five guineas; six months, eight ditto; as perpetual pupil, ten ditto.

Theatre of Anatomy, Windmill-street.—Mr. BRODIE will begin his Lectures on the Theory and Practice of Surgery, on Wednesday the 5th of October, at seven in the evening.

Mr. CARPUE will commence his usual Course of Lectures on Anatomy, the 1st of this present month.

Dr. SQUIRE will, on Tuesday the 4th of October, begin a Course of Lectures on the Theory and Practice of Midwifery, and the Diseases of Women and Children.

Dr. RAMSBOTHAM will begin his Lectures on Midwifery, including the Diseases of Women and Children, on Thursday, October 6th, at six in the evening, at his house, No. 9, Old Jewry.

Dr. DAVIS, Fellow of the Royal College of Physicians in Edinburgh, Licentiate of the London College, and Physician Man-midwife in ordinary to the Queen's Lying-in Hospital, will commence his first winter Course of Lectures on the Theory and Practice of Midwifery, and on the Diseases of Women and Children, on Wednesday the 5th of October, at a quarter past ten o'clock in the forenoon.

Mr. T. J. PETTIGREW, F.L.S. will commence a Course of Lectures on Human Anatomy and Physiology, on Friday the 28th of October. The Course, to be comprised in eighteen Lectures, will be delivered on Wednesday and Friday evenings, at half past eight o'clock precisely. The introductory Lecture will consist of a general View of the Animal Structure.

Hospitals for the Small-pox, for Inoculation, and for Vaccination, at Pancras, Middlesex.—The following notice is given on a board attached to the premises: "Poor persons, of all ages, in the small-pox, are admitted any day and hour; and for inoculation, any morning from nine till eleven o'clock. Mothers and nurses may stay with children under five years of age, paying for their board. To out-patients, vaccination is giving daily from ten till twelve o'clock, Sunday excepted.

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——— Carbonas		4 0
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—— Vini rectificatus		24 0
Syrupi, from 1s. 8d. to		3 0
Sulphur		0 8
—— Præcipitatum		1 0
Tamarindus opt.		2 6
Terebinthina Vulgaris		0 9
—— Canadensis		8 0
—— Chia		6 0
Tragacantha Gummi		10 0

Tinctura Aurantii	M. lb.	3 9
—— Aloes		4 0
—— Composita		9 6
—— Assafœtidæ		5 6
—— Balsa. Tolut.		5 6
—— Benzoini Comp.		6 9
—— Camphoræ Comp.		4 0
—— Cardamomi		4 0
—— Comp.		4 0
—— Calambæ		3 9
—— Capsici		3 9
—— Cascarillæ		4 6
—— Castorei		7 0
—— Catechu		4 6
—— Cinchonæ		6 6
—— Compos.		6 6
—— Cinchonæ Ammon.		7 6
—— Croci		6 6
—— Digitalis		4 6
—— Ferri Ammoniati		4 0
—— Cinnamomi		4 6
—— Comp.		4 6
—— Gentianæ Comp.		4 0
—— Guaiaci		6 0
—— Ammon.		6 0
—— Hellebori Nigri		4 6
—— Humuli		5 0
—— Hyoscyami Nig.		4 6
—— Jalapæ		4 6
—— Japonica		4 6
—— Ferri Muriatis		5 0
—— Kino		5 0
—— Lyttæ		3 9
—— Myrrhæ		4 6
—— Opii		7 0
—— Camphorat.		4 6
—— Quassiæ		3 9
—— Rhei		4 6
—— Comp.		4 9
—— Scillæ		4 6
—— Sennæ		4 9
—— Serpentariæ		6 0
—— Valerianæ		4 6
—— Ammon.		5 6
—— Zingiberis		4 6
Valerianæ Radix		1 8
Vetatri Radix		1 6
Unguentum Hydrargyri fort.		5 0
—— Mit.		3 0
—— Nitratis		3 3
—— Nitrico-oxy.		2 9
—— Sulphuris Comp.		1 9
—— Allii ung. 1s. 8d. to		2 0
Uvæ Ursi Folia		2 4
Vinum Aloes		3 6
—— Antimoniale		3 0
—— Ferri		3 6
—— Ipecacuanhæ		5 6
—— Opii		8 0
Zinci Oxydum		4 6
—— Sulphas purif.		2 0
Zingiberis Radix opt.		2 4

Leeches, 24s. per hundred.—Essential Salt of Lemons, 4s. 6d. per dozen.

METEOROLOGICAL REGISTER.

From August the 25th, to September the 25th, 1814.

Kept by C. BLUNT, Philosophical Instrument Maker, No. 38, Twistock-Street, Covent-Garden.

Moon.	Day.	Wind.	Barometrical Pressure. Max.	Min.	Mean.	Temperature. Max.	Min.	Mean.	
	26	W	29·86	29·73	29·805	72	57	62·6	Fair
	27	WbyN	29·98	29·91	29·945	71	58	62·6	Fair
	28	W	30·08	30·—	30·04	70	56	61·6	Fair
	29	NW	30·16	30·11	30·145	69	55	60·6	Fair
○	30	NW	30·17	30·17	30·17	70	56	61·3	Fair
	31	NW	30·37	30·20	30·307	71	58	62·6	Fair
	1	NbyW	30·38	30·37	30·379	73	59	64	Fair
	2	W	30·32	30·25	30·282	74	58	64	Fair
	3	WbyS	30·25	30·25	30·25	72	56	62	Fair
	4	W	30·24	30·16	30·213	70	55	61	Fair
	5	NW	30·12	30·12	30·12	65	55	58·6	Fair
◐	6	WbyN	30·12	30·02	30·062	66	57	59·6	Fair
	7	WbyN	29·82	29·76	29·782	65	56	58·3	Fair
	8	W	30·09	29·95	30·212	62	54	56	Fair
	9	NW	30·10	30·09	30·097	62	55	56·6	Fair
	10	NW	30·12	30·08	30·105	69	54	59·6	Fair
	11	W	30·12	30·09	30·102	70	56	61·3	Fair. Aurora Bor. at night.
	12	SW	30·14	30·14	30·14	72	53	61·3	Fair
◑	13	WbyN	30·15	30·13	30·137	68	52	58	Fair
	14	NW	30·13	30·13	30·13	65	49	55·3	Fair
	15	NW	30·13	30·12	30·127	64	48	55	Fair
	16	NW	30·07	30·04	30·055	64	49	54·3	Fair
	17	NW	30·04	30·04	30·04	65	50	55·3	Fair
	18	W	30·08	30·06	30·067	70	54	58·6	Fair
	19	WbyS	30·08	30·08	30·08	69	53	59	Fair
	20	SW	30·—	29·97	29·969	73	59	63	Fair
◐	21	S	29·83	29·80	29·812	75	57	63·6	Fair
	22	S	29·77	29·77	29·77	73	54	61·6	Rain
	23	S	29·80	29·75	29·78	70	53	59·6	Rain
	24	SW	29·72	29·70	29·706	68	56	58	Fair. Rain & thund. at night.
	25	SW	29·70	29·70	29·70	69	53	59·3	Rain

RESULTS,

Mean barometrical pressure 30·051		Mean temperature	59·8 deg.
Maximum 30·38	wind at NW	Maximum 75,	wind at S
Minimum 29·70	—— SW	Minimum 48,	—— NW

Scale exhibiting the prevailing Winds during the Month.

N	NE	E	SE	S	SW	W	NW
0	0	0	0	3	4	13	10

	Mean barometrical pressure.	Mean temperature.
From the full moon on the 30th August, to the last quarter on the 6th Sept.	30·537	61·9
—— last quarter, to the new moon on the 13th	30·082	58·9
—— new moon, to the first quarter on the 21st	30·022	57·3

Cases

Cases of cholera, diarrhœa, and colic, have been frequent: amongst the latter were some instances of Colica pritonum. Jaundice has been more than usually prevalent; and some distressing instances of bilious vomiting have occurred. Synochus has affected several persons, but no fatal case has happened within the reporter's observation. Scarlatina anginosa, of a mild character, is just now very prevalent; in a large ladies' school where several children are affected with it, the symptoms are so slight, that the only treatment pursued has been purgatives, and cold water as a drink, with directions to the nurse to sponge the body should the fever at any time be high.

MONTHLY CATALOGUE OF MEDICAL BOOKS.

A VIEW of the Comparative Advantages and Disadvantages of the Navy and Army Surgeon, and of the Surgeon in private Practice; together with a proposed Amendment of the Condition of Assistant-Surgeons at their outset in the Navy. By William Cullen Brown, M. D. Ed. Surgeon of His Majesty's prison-ship Arve Princen. 1814.

The Accoucheur's Vade-Mecum; being the Substance of a series of Lectures delivered at the Westminster Lying-in Institution, Queen-square. Second edition, revised and corrected. 12mo. boards, 7s.

Thoughts on Puerperal Fever, and its Cure by Spirits of Turpentine; illustrated by Cases in the Lying-in Hospital, Dublin, &c. By John Brenan, M.D. 8vo. sewed, 1s.

Observations on the Nature and Cure of Dropsies, and particularly on the presence of the Coagulable part of the Blood in Dropsical Urine; to which is added, an Appendix, containing several Cases of Angina Pectoris, with Dissections, &c. The second edition, corrected and improved. By John Blackhall, M.D. Physician to the Devon and Exeter Hospital, and to the Lunatic Asylum near Exeter. 8vo. boards, 12s.

A Catalogue of an extensive Collection of new and second-hand Medical Books; to which is added, a complete List of the Lectures delivered in London, with their terms, hours of attendance, &c. and Tables of the Pay of the Medical Department of the Army, Navy, and East India Company's service. By John Anderson (late Underwood,) 4, West Smithfield.

NOTICES TO CORRESPONDENTS.

We regret exceedingly to have been under the necessity of postponing Dr. Sutton's answer to Mr. Want, but our original department was completed before it came to hand.

Upon the subject of Dr. Sutton's second letter, and the anonymous enclosure, Mr. Want assures Dr. S. that the writer of it is completely mistaken as to the circumstances there spoken of: the letter will, however, be published in our next Number, accompanied with a statement of facts relative to the domestic occurrence to which he refers, of which an account was not only given to the Medical Society, but has been and is still related in the most public manner to most individuals with whom Mr. Want converses upon the subject, and most especially to the gentlemen attending the Meetings of Sir J. Banks.

THE

Medical and Physical Journal.

5 OF VOL. XXXII.] NOVEMBER, 1814. [NO. 189.

"For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly Journals; and there never existed any work to which the faculty in EUROPE and AMERICA were under deeper obligations than to the Medical and Physical Journal of London, now forming a long, but an invaluable series."—RUSH.

For the Medical and Physical Journal.

REPORT *of* DISEASES *from* SEPTEMBER 24*th to* OCTOBER 24*th*;

BY MR. WANT.*

TOWARDS the latter end of the last month, SCARLATINA made its appearance, with symptoms in many cases of a threatening nature. In some it was accompanied by typhus fever; but one instance only of death has occurred within my observation.

MEASLES are also very prevalent. I am informed that several children have died, but as it has been among the poor, in situations unfavourable to recovery, under circumstances otherwise propitious, the fact does not lead to the inference of malignity in the disease.

Strong prejudices still exist, even in well-informed circles, in favour of keeping these patients in a warm temperature. But the effects of a contrary treatment have been again witnessed in several instances; cold ablution of the skin having produced a rapid diminution of the fever, and all the symptoms.

In my own family, where accident furnished me with the means of judging by contrast, the most prejudiced mind must have been satisfied of the superiority of the refrigerant treatment to that generally employed. I was led to adopt this practice three years since, in consequence of observing in my own person the beneficial effects of cold air and large draughts of iced water, in a catarrh of such severity as to confine me to the room, until a professional engagement compelled me to go abroad. The weather was intensely cold, and the relief I experienced in the open air was so remarkable, that upon that occasion I made several experiments on myself, to determine the agency of cold and heat in this *inflammatory* disease.

* For the Meteorological Report, and Remarks on the Weather, see the last pages.

A great weariness, with aching of the limbs, very common in catarrh, induced me to preserve a recumbent position: for the sake of trial, therefore, I went to bed, wrapped my head in flannel, and took warm drink. The temporal arteries immediately began to pulsate, accompanied with other marks of high arterial action about the head and eyes, and a no less prominent effect was an increase of all the catarrhal symptoms. On again quitting the room for the open air, the catarrh abated, but was uniformly increased on my sitting near the fire, or on my return to bed, to which I felt myself inclined from the weariness of my limbs.

The establishment of this fact is important, as it leads to a valuable improvement in the treatment of inflammatory complaints in general. It is admitted, that any thing which accelerates the circulation is hurtful in these affections, yet warmth and warm drinks are considered indispensible to success, and the Systematic instructs us to avoid the use of cold water, as a destructive poison. This prohibition will be found on examination to be not only erroneous, but contrary to the authority of names high in the estimation of the profession. Can the practical precept of Sydenham have escaped observation? With him the most approved modes of treatment, the most copious abstraction of blood, often failed, while the patient was kept to his bed.—Let him speak for himself: "Facio ut lecto quotidie eximatur, idque ad horas aliquot, prout vires suaserint; quod quidem tanti est in hoc morbi genere, ut si lecto æger jugiter affigatur, neque hæc tam larga sanguinis evacuatio, neque remedia alia utcunque refrigerantia, at dicta symptomata perdomanda vel minimum aliquando proficiant."*

Catarrhal and Pneumonic Complaints made their appearance in a few instances about the 5th of October. One case of inflammation of the lungs was fatal, and ran its course with a rapidity truly awful. The subject of it, Mary Keele, 9, Colonnade, Guildford-street, seemingly about ten years of age, was not thought sufficiently well on Sunday to attend a religious school to which she belonged, but was not brought to me until the morning of Tuesday. She was able to walk to and from my house in North Crescent, though she felt great weariness. Her respiration was hurried, and she was troubled with a distressing cough. The sensations about the chest were described as a feeling of constriction rather than actual pain. She was unable to take a full inspiration without an increase of the symptoms. The pulse was quick and feeble; the tongue furred, but no febrile heat on the skin was present.

* Sydenham, op. Pleuritidis curatio.

On

On account of the youth of the girl, and the weakness of pulse, I ordered blood to be taken by cupping from the chest, but for trifling reasons, uninteresting to the public, it was not done, the mother promising most faithfully to let me hear from her in the evening, lest, as I expressed a fear, the symptoms should increase. I saw nothing of her until Thursday, when I was requested to visit her at home. The days lost were fatal to our hopes. I found the respiration had become considerably more laborious, with great anxiety of the countenance. The lips were livid, and she might literally be said to be struggling for breath. The cupping was immediately performed, and a blister applied, but it was too late: in the evening she died.

A delicate female, twenty-two years of age, after having had one child, was afflicted for several months with a discharge of bloody fluid from the uterine organs, accompanied with a train of dyspeptic and hysterical symptoms. The frequent dependence of some species of this complaint on the disordered condition of the stomach, is not sufficiently attended to in practice, which is improperly considered to be the effect instead of the cause. Hence it is usual to order the patient to be kept cool, to live abstemiously; and sometimes bleeding has been most unaccountably recommended even in this species. A variety of treatment had been adopted here without benefit: *bleeding* and cold injections to the vagina had not been forgotten. I prescribed 15 drops of the liquor potassæ subcarbonatis three times a-day, with no other remedy but the occasional use of good wine. This had, as usual, the effect of diminishing the dyspeptic feelings, and the uterine complaint gradually ceased. Reasoning upon some of the effects of this medicine, it would not be easy to account for the benefit arising from it in these cases. Alkalies are known to have the property of attenuating the blood, and the continued use of them, within my own experience, has superinduced scurvy. I should here observe, that its use in menorrhagia has been confined to that form of it which was observed in the patient above-mentioned; and that perhaps in strict propriety the correctness of the term is questionable. Change the colour of the discharge, and the disease would be leucorrhœa.*

Leprosy occurred in a boy eleven years of age. He was literally covered from head to foot, leaving scarcely space sufficient to preserve the characteristic rotundity of

* Cullen calls leucorrhœa menorrhagia alba, for, says he, leucorrhœa almost always either follows or accompanies menorrhagia, and often arises from the same causes as the menorrhagia rubra.

the crusts. The appearance of the spots on the face was somewhat different from those in the limbs, being much smaller, and not raised from the level of the surrounding skin, while in the thigh, arms, and particularly in the hairy scalp, a thick incrustation had formed. The Plummer's pill, with an electuary of crude antimony, black sulphuret of quicksilver, and nitre, was given, with evident amendment of the general health; but as it was thought a good opportunity to make trial of different external remedies, to discover their comparative efficacy, it is not easy to say whether it would alone have been sufficient for the cure.

The ointment of nitrated quicksilver, and a saturated liniment of borax and honey, were each applied to different limbs. The face was smeared with a mixture of equal parts of sulphuric acid and spirit of wine, and the right arm was immersed in water as hot as could be borne several times in the day. The sulphuric acid was entirely useless, on the contrary the borax liniment seemed the most eminently beneficial, the crusts being not only more readily loosened by it, but the diseased surface beneath sooner recovered a healthy condition. It was, however, less serviceable when applied to the head, where the crusts were remarkably thick; but an ointment made of slaked lime and lard, gradually removed the disease in this part. The ointment of nitrated quicksilver, and the fomentations of hot water, were also useful, but not in an equal degree. The result of these trials is decidedly in favour of the borax liniment.

Whilst prosecuting the inquiry, I found that an ointment of salt prunella was strongly recommended by the Hon. Mr. Boyle as a specific for leprosy, which, from its resemblance to borax, I am induced to think well of. It should be observed, that in former cases the internal use of the solution of arsenic has generally been followed by complete success, and was laid aside on the present occasion merely for the purpose of making trial of other remedies.

An attentive examination of this case, has strengthened an opinion which I have entertained, that Lepra and Psoriasis (taken in its modern acceptation) are diseases not essentially different. The spots on the face of this subject, had they been found unconnected with the disease, as it shewed itself on the surface of the body, would, according to Willan, have been denominated Psoriasis Guttata; distinguishable only from Lepra (which is said by this author never to appear in the face) by its scale or scales being thinner, and more easily separable than in the latter. In this same case, though in general the leprous crusts were distinct, yet in some parts at the elbows they ran into one another, putting on the character of the Psoriasis Diffusa; and had the

disease been confined to this part, it must have obtained that appellation. Again, at one period, when it was nearly subdued, the spots, originally as large as a sixpence, had progressively lessened, still preserving a circular form, but most of them had lost the thickened crust. The disease in this stage, without consideration of the previous circumstances, would have been called Psoriasis Guttata.

Psoriasis Diffusa, supposed by some to be peculiar to washerwomen, was observed in a very respectable lady in advanced years. A solution of arsenic twice a-day, with Plummer's pill at night, and an ointment, consisting of two drams of sulphuret of potash, and an ounce of lard, are being used with success, as the disease is evidently on the decline.

A melancholy case has been communicated of death occurring soon after parturition, without any symptoms having existed during life sufficient to lead to an apprehension of danger. The labour, of six hours duration, proceeded naturally, if we except a deficiency of effective bearing-down pains, which made it necessary, in the opinion of the attending practitioner, to have recourse to the blunt hook for the extraction of the fœtus. The breech presented, and the delivery was easily effected, but the powers of life gradually failed, and the patient died apparently from exhaustion. On dissection, it was found the cervix uteri and one of the fallopian tubes were in a state of sphacelus; the latter of these was considerably enlarged and tumid. It seems obvious that we must look beyond the process of parturition for the mysterious event of this case. It was recollected that, for about three weeks before delivery, sensations were complained of in the uterine region, which were described as being uneasiness rather than acute pain, and are so commonly felt in similar circumstances that no suspicion was excited of the mischief that was going on; nor were they of sufficient magnitude to prevent the patient's taking her usual walks until the day of her death.

We regret that we have no authority to publish the name of the very respectable accoucheur who attended, the account having been given us without any view to publication.

A wretched receptacle of poverty and filth, in Eagle-street, furnished two cases of Typhus, but they yielded readily to cold ablution. It is hardly necessary to remark, that, independent of the advantage of cleanliness among the poor, washing of the body is extremely useful in all cases of fever, where the heat of the body is above the natural standard. The head-ach, in one of the cases, was intense, and was much relieved by the application of wet cloths to the forehead.

11, *North Crescent.* JOHN WANT.

For the Medical and Physical Journal.

Some Observations on Peripneumony; by W. ROBERTSON, M.D. A.O.L. and C.C.E.

"Ex quo (pulmone scil.) vehemens & acutus morbus oritur, quem περιπνευμονιαν Græci vocant." *Celsus de Med.* p. 224.

INFLAMMATION of the lungs is a disease so rapid in its progress, and at the same time so dangerous, not only from the usual terminations of inflammation, but also from glutinous, bloody, and serous effusions into the cells of the lungs, often producing suffocation, as to require the active exertions of the physician in every stage of the affection.

Boerhaave and his commentator Van Swieten are very solicitous to establish all the minute subdivisions of this disease: the consequence has been, much confusion and repetition; while Hoffman, Cullen, and Gregory have, by a praiseworthy simplification, dissipated the obscurity which formerly enveloped the study of this malady. Two divisions now remain—peripneumony and pleurisy, where the lungs, and where the membranes of the chest, are inflamed: the latter we do not propose to notice here. The first species is characterised by a dull pain in the side or breast, often a sense of oppression,* only accompanied by a cough and dyspnœa.† This affection is frequently the offspring of catarrh, particularly in old people, coming on with a cold stage, and usual symptoms of pyrexia. The pulse is generally soft, and often does not exceed 90 or 100 strokes in a minute.‡ The accompanying anxiety, oppression, and dyspnœa, appear to exist independent of the pain or cough, and have no remission. The cells of the bronchiæ seem

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* "Id genus morbi plus periculi quam doloris habet." *Celsus*, p. 224.

† Galen, de Locis Affectis, p. 475, observes, "quum vero spirandi difficultati cum angustia & gravitate febris acuta simul accedit, est ille affectus inflammatio pulmonis;" and Celsus, de Med. p. 224, writes thus of peripneumony: "Pulmo totus afficitur. Hunc casum ejus subsequitur tussis, &c. Præcordiorum totiusque pectoris gravitas, spiritus difficultas, magnæ febres, continua vigilia, cibi fastidium, tabes." And Hippocrates describes this disease in few words: "Tussis detinet, orthopnœa, et anhelatio." *De Morbis*, tom. vii. p. 574.

‡ Galen asserts of the pulse, "peripneumonicorum magnus est & undon quid habens, et obscurus, & mollis, similiter ac pulsus lethargicorum." *De Pulsibus.*—It may be here remarked, that acute pain is generally accompanied (as in pleurisy) with a hard and frequent pulse, while the inverse of the position most commonly holds, as in this disease.

contracted

contracted and compressed, in consequence of the inflammation, and exhalation takes place into those parts of the lungs which escape this compression, while a spasmodic action affects both the muscles of the larynx and of the chest, as an induction of pain. The dyspnœa sometimes amounts to orthopnœa, but generally the patient lies easiest on the sound side, though this is occasionally reversed, and in some instances the back is the position resorted to.* In severe cases, the patient can breathe only in the half-erect posture, with a slight inclination of the head, thus rendering the action of the diaphragm more free. The cough from the beginning is for the most part accompanied with some expectoration, frequently tinged with blood, and is ejected with tolerable facility. The sputa at an early period are thin and viscid, but, as the malady advances, assume a white thick opaque form, and denote the resolution of the inflammation,† though there are cases on record of resolution having occurred without any expectoration. As the disease proceeds, a considerable intumescence and inflation of the face supervene, from the impeded circulation through the lungs principally, and consequent accumulation in the jugular veins, while there often exists an altered determination of blood to the head, with increased action in its arteries, producing vertigo, intense head-ach, and delirium, which latter sometimes occurs early in the disease. The face often assumes a livid hue, the eye-lids swell, and the lips become black, indicative of venous accumulation and deficient oxygination. It is of importance to observe, that, though the pain is not violent, and often confined to a single spot, yet very extensive and most active inflammation frequently exists under these circumstances, both in the parenchymatous and pleuritic affections. The pain sometimes darts from one side to another, or to the back, demonstrating a severe disease: occasionally it remits, and the young practitioner is apt to mistake the disease, particularly if attended by moderate pyrexia. The patient is supposed to labour under asthma, catarrh, or hydrothorax, till the pain returns, which it often does with redoubled violence, dissipating all discrepance of opinion in regard to the nature of the disease.

* The position of patients was much attended to by Hippocrates, and influenced his prognosis: "Si in morbi vigore ægrotus velit residere hoc in omnibus quidem acutis morbis malum est, pessimum vero est in peripneumoniis." *In Prognosticis*, tom. viii. p. 603.

† "Sputum vero flavum mixtum cum pauco sanguinis in peripneumonicis, in initio morbi, excretum, salutare est & valde confert." *Hippoc. in Prognost.*

The

The diagnosis and prognosis will be understood from an attentive consideration of the symptoms.

In addition to the terminations of inflammation in general,* this disease has a conclusion peculiar to itself, to wit, an effusion of blood and serum into the cellular texture of the lungs, often producing suffocation. This, indeed, is the ordinary termination when the disease proves fatal, dissection in almost every instance affording ample testimony that such effusion had taken place, and that exudation from the surfaces of the opposed pleuræ had cemented, by its viscid crust, the two membranes. The pericardium also, and, what is usually denominated, cavity of the thorax, evince similar unequivocal demonstrations of high vascular action, under the forms of bloody and serous effusions. These adhesions, doubtless, often take place from slight inflammations, in consequence of juxta-position and similarity of structure of the pleura, but not to the extent usually observed in subjects which have fallen a sacrifice to this disease. Effusion not unfrequently takes place without proving fatal; occasionally, however, this event occurs suddenly, when, from the mildness of the preceding symptoms, it was not expected, and often a few hours only previous to death. Sometimes a gradual and painful suffocation comes on, accompanied by great anguish and delirium, while the patient is totally unable to expectorate the collected sputa from the failure of the vires vitæ. The lungs, after death, in such cases, generally sink in water, and much resemble in colour and density the viscus of the liver, demonstrating the abolition of the air cells, the effects of inflammation and effusion conjointly. Resolution frequently takes place even where no remedies have been used, announced by copious bloody expectoration, or profuse diaphoresis, denoting a relaxation of sputic stricture externally, and (sympathetically) internally even as late as the seventh or eighth day of the disease; but we have no doubt that some remission very generally occurs, in these instances, earlier than this period. Sometimes a diarrhœa, a copious sediment in the urine, an hæmorrhage from the nose or anus, an abscess in the cheek or groin, severally prognosticate safety; but the experienced physician will regard the discharge from the lungs, in the form of thick bloody sputa, easily ejected, as the most certain criterion of approaching convalescence. Hippocrates justly observes,

* We do not propose noticing here the terminations in suppuration, hydrothorax, and gangrene. See Huxham, Burserius, Inst. Med. Pract. vol. iv. part i. For dissections, see Morgagni.

"qui-

"qui in peripneumoniis siccis paucæ concocta educunt, metuendi sunt." p. 872.

This disease occurs much more frequently in adults from fifty to seventy years of age, than in others, and generally attacks the male. It is a disease of the strong, vigorous, and plethoric, for the most part. A previous peripneumony strongly predisposes (occurring sometimes periodically), as do asthma, catarrh, and dyspnœa, from whatever cause, also malconformation. The exciting causes are especially cold applied when the body had been previously heated, whether as directed to the surface or lungs; violent exercise in a plethoric state of the system, of the body generally, or of the lungs individually. Intemperance is a frequent predisposing and also exciting cause of peripneumony. The disease is frequently epidemic, and symptomatic of contagious diseases, though not depending on any specific contagion for its own generation.

From the importance of the organ attacked in this disease, the remedies ought to be applied as soon as possible, and in full vigour. Every part of the plan termed antiphlogistic (with the exception of the application of cold)* should be rigorously enjoined, the indications being to resolve inflammation, and to subdue inordinate action in the heart and arteries. To accomplish these purposes, copious and repeated bleedings from a large orifice are to be had recourse to as early in the disease as possible: a few ounces of blood will not suffice, for, as Botallus remarks, "Nunc huic satis fuerit missio sanguinis unciarum decem aut duodecim? non certe, sed librarum vel duarum vel etiam trium."† It is a principal remedy in the first days of the disease, but, if neglected in the beginning, or if the symptoms have not yielded to its influence, and threatening effusion and suffocation, with collapse of the system, ensue, it will not bring safety, it will accelerate the unhappy termination; but local bleeding may be employed with some advantage. After the first bleeding, a large blister ought to be laid on the seat of the pain, and repeated if necessary, while the detraction of blood is to be recurred to in the evening, for little relief is frequently obtained from a first venesection. In the early days of the disease, this remedy is to be had recourse to, till the breathing is relieved, but syncope ought not to be induced in peripneumony, as suffocation might ensue, inde-

* See Report of Diseases at the commencement of this Number, under the article "Measles."—EDITORS.

† De curatione per sanguinis missionem.

pendent of other causes for its prohibition. We ought at the same time to keep in view, that blood-letting in the old, in the intemperate, and in peripneumonia notha, must be kept within certain limits, and that the induction of extreme debility (and its not unfrequent consequence, hydrothorax) is as dangerous as the disease we are combating. The bowels are to be kept soluble by laxative clysters, and if any opening medicine is necessary, it must be of the mildest class. The patient is to be kept as much as may be in the erect posture, and the heat of his chamber ascertained to be under 60° of Fahrenheit. The mucilaginous and demulcent drugs may have a place, and the usual drinks (in a tepid state) be given *ad libitum*. These are the remedies in the early period of peripneumony in the strong and plethoric; but it is to that stage of the disease where secondary symptoms of the most alarming tendency, the effects of inordinate action, arise, that the author is solicitous to call the attention. Where the breathing is heavy, laborious, and oppressed, where the face is bloated and livid, where the pulse is small, hesitating, and irregular,* where the countenance shews unspeakable anxiety, the eyes swollen, the lips full and livid, the nostrils dilated, the head not clear, and a clammy sweat bedews the face and breast only. If any medicine can, under such perilous symptoms, bring healing and safety, it is the rapid introduction of mercury into the system, with a liberal use of diffusible stimuli. Under this regimen, patients who were rapidly hastening to the tombs of their fathers, have been saved. A grain of the submuriate of mercury, conjoined with opium, and exhibited, according to the urgency of the symptoms, every one, two, or three hours, till the gums are affected, by exciting a new train of action, in place of the morbid febrile one about to terminate, very generally brings a speedy alleviation of all the dangerous symptoms. A certain quantity of wine, and preparations thereof, should be enjoined, and the blisters to the head and side (and to the thighs and legs if re-action does not advance) are to be repeated, of ample dimensions. In fact, I consider the circumstances of the disease above described as similar and analogous to those of the secondary stage of the endemic remitting fevers of hot countries, when the depletory means have not been employed in time, or have proved ineffectual in preventing the induction of alarming secondary symptoms. Where the stomach, liver,

* Aretæus observes, "pulsus parvi, frequentissimi & deficientes, quando ipsis mors proxima est." *De Dig. Morb. Acut.* lib. 2, cap. i. p. 11.

or

or brain, are threatened with disorganization, from inflammation, injection of blood, and new arrangements; or rather where this process of disintegration has already commenced, and where we have seen the best effects to result from the rapid introduction of mercury, and liberal exhibition of diffusible stimuli; the warm bath should be appended to these means, and is a powerful remedy; but the purging so necessary in endemic fever, is here to be sedulously avoided. Calomel and opium, frequently repeated, with draughts of warm wine (or wine and water), must be liberally administered, till the pulse rises and becomes regular, when the latter must be diminished, or withdrawn altogether. The mercury must be carefully attended to, and its effects on the bowels anticipated and obviated, for purging is a dangerous occurrence at every period after expectoration has commenced.

The practice of exhibiting calomel and opium in some of the genera of febres and phlegmasiæ is not new. Dr. Hamilton, of Lynn Regis, mentions his having done so in the ninth volume of the Edinburgh Medical Commentaries, but principally during the inflammatory stage (premising, however, venesection, &c.) of this and other diseases of the order of phlegmasiæ. To me it appears that mercury produces its most beneficial effects at that period when inordinate febrile action has caused, or is about to produce, an incipient venous paralysis and disorganization in the viscus, the immediate seat of the disease. It is at this time that the mercurial fever or excitement should commence, and if the atony induced by inordinate action has not encroached too far on the powers of life, immediate re-action may be expected, which is to be kept up for a sufficient length of time, till the dangerous collapse of the system is obviated, a return of the bloody sputa induced, a gentle ptyalism engendered, or, in short, till the pulse becomes larger and fuller, and many of the dangerous symptoms disappear.

In addition to the immediate good effects of mercury, I have also to adduce its influence in often preventing the occurrence of the usual sequelæ of inflamed viscera, a long train of chronic misery.

In some future communication, I hope to remit some cases illustrative of the beneficial effects of mercury in the secondary stages of visceral inflammation, and have now only to beg excuse for trespassing so long on your valuable pages.

Berwick on Tweed, W. ROBERTSON, M.D.
June 28, 1814.

For the Medical and Physical Journal.

Case illustrating the Effects of a Vegetable Poison; by Mr. J. ADAM, jun. of Forfar.

ON Saturday, the 9th of October, 1813, at six, p. m. a tradesman of this place came to me in great distress, and begged that I would immediately visit his daughter, a girl of eight years, whom he declared to be poisoned by eating mushrooms. She had eaten one fungus on the preceding evening, between seven and eight; and on Saturday, at three, p. m. six more of the same species, of a middling size; the membrane which covers the upper surface had been removed from all of them: they were dressed with salt an hour before being used, and afterwards roasted at a common fire. Having taken no dinner previously, she devoured them greedily. She continued apparently quite well, running about as usual, until a few minutes before five, when, after having taken tea, she complained slightly of a soreness affecting the belly; and, hastily eating an apple which her mother gave her, on moving across the room she cried out that she felt herself giddy, and instantly fell on the floor, deprived of sense and motion. When carried to bed she uttered a wild cry, and the attendants remarked a peculiar fierceness of the eyes.

Some ipecacuanha wine had been administered, and she also drank about two English pints of warm water, but without any vomiting. I dissolved 25 grains of sulphate of zinc in a small quantity of water, and ordered it to be given without delay, which, as I found on visiting her a little afterwards, had been swallowed without effect. When I first saw her (about a quarter past six) she was stretched out in bed in a comatose state, with the countenance somewhat swollen, and of a ghastly leaden aspect; pulse greatly intermittent and tremulous, and so weak as scarcely to be felt, with the eye-balls pulled up towards the angles of the orbits, and fixed immoveably in their sockets, affected now and then with startings of the limbs, and severe convulsive motions of the head and upper part of the trunk. She appeared altogether unconscious of what was passing around her, and nothing was expected by the by-standers but speedy dissolution. Indeed all the symptoms strongly marked the danger of the case, and shewed in the most unequivocal manner the effect of some deleterious agent exerting a powerful influence on the system in general. An unusual degree of coldness prevailed over the whole body, and the heart laboured greatly in its action. On seeing the condition she was in, I requested a little cold water, which was dashed

dashed from the distance of a few feet on the naked breast. This application produced the stimulant effect I had looked for; and making a sudden start, which raised the head from the pillow, the patient opened her eyelids, and for a few seconds stared wildly around. Recollecting the observations of Richerand on the *ultimum moriens* of the human body, and his recommendation of stimuli to the gut in cases where the powers of life are low; I then ordered a clyster, consisting of 25 grains of camphor made up into an emulsion, with a little gum arabic mucilage and water; and, as no vomiting had as yet ensued from the first quantity of sulphate of zinc, half a drachm more was at the same time given, dissolved in water as before, and it was also attempted to assist the action of the emetic, by tickling the fauces, and compression with a bandage over the epigastric region; heated flannel cloths were applied in quick succession to the surface; a free evacuation followed from the injection, but had no appearance of fungi intermixed. From the power of swallowing being already much impaired, it was with considerable difficulty that the second emetic solution was got over, and only by repeated efforts, after rousing our patient by the application of water of ammonia to the nostrils and mouth; and, although the greater part appeared to have been received into the stomach, she only once shewed an inclination to vomit, and a little mucus merely mixed with saliva was ejected.

The agitation produced by this, however, seemed to have had a good effect in rousing her, but she quickly relapsed into her former lethargic condition, and the symptoms always increased; the convulsions becoming more violent, longer in their duration, and recurring at shorter intervals, and the coldness and rigidity in the extreme. All attempts to discharge the noxious matter were now abandoned as unavailing, and our whole care was directed to counteracting the pernicious effects of the poison, whose operation had but too clearly manifested itself.

The practice which had in part been begun, was most strenuously persisted in, and however desperate the case appeared, I determined on persevering, and to wait the result. Equal parts of aq. ammoniæ and water were mixed together, and of this she had two or three tea spoonfuls every eight or ten minutes, and occasionally in the intervals, or alternated with it, such quantities of rum and water as she could be got to swallow. The aq. ammoniæ simply was frequently rubbed on the face and about the eyes and mouth, which affected her considerably, and generally produced a momentary flushing of the countenance. Its employment in this mode

mode we always premised, as facilitating the exhibition of the other remedies; and, taking advantage of the mouth being open from the cough or sneezing which was excited, we poured the liquids into the stomach, which, from the rigidity of the jaw, and palsied condition of the muscles of the pharynx and gullet, could not otherwise have been well accomplished; and, even with the assistance of this, we seldom could get the full dose introduced, some being generally lost from the involuntary motions of the head during the time of administering it.

The warmth of the body was attempted to be restored by the continued application of heated flannels, as at first employed; and by means of the same, the whole surface was frequently rubbed with common salt, and also with aq. ammoniæ. I dashed cold water in small quantity four different times on the breast, and each application was succeeded by a violent movement of the upper part of the body, and a wild kind of scream, and the pulse became for a little more regular and fuller.

About an hour after the first injection, an ounce of common turpentine was made into a clyster, and one-half thrown up the rectum, which produced a copious stool, rather fetid, but having no appearance of fungi. She was often violently shaken, but without any sensible effect. Nitre was largely decomposed around the patient in red-hot shovels, (the only instrument that offered itself,) and at times, instead of the hartshorn and water, the alcohol ammoniatum, diluted and mixed with ether, and wine and water, with a portion of powdered capsicum, were substituted; all which, as before, we still continued to administer, at an interval of about ten minutes. The pulse now altered much, and from being intermittent became regular, but weak and quick, being upwards of 130.

During the employment of all these means, which might have occupied the space of three hours or a little more, excepting the change in the state of the circulation, we perceived no favourable symptom that might lead us to look for a happy termination of the case; but to have our patient alive after that lapse of time was more than appearances at first warranted us to expect, and we were encouraged to continue the practice, although no positive mitigation of the symptoms had as yet taken place. She was then taken out of bed, and put up to the neck in a large stand full of warm water, (the vessel being inclined as much as could be done to the horizontal position,) and kept immersed in it for ten minutes. After removal from the bath, the pulse became fuller and less quick, being reduced to 80 strokes in the

minute. A mustard poultice was then applied to the region of the stomach and one to the sole of each foot. Soon after a pretty general perspiration broke out, and the heat of the body was also sensibly increased to the feel, though yet below the standard of health, the extremities were even more convulsed, and the muscles of the calf became permanently contracted, and felt under the hand rigid and hard; but the upper part of the body was much less affected than at first. Some tincture of soap and opium, with a large proportion of this last, was rubbed in over the limbs, and the second half of the turpentine injection was administered, but flatus merely accompanied its evacuation. The pulse got quicker again, and indeed seldom continued for half an hour steady, but the breathing never was laborious, and did not appear to deviate from the natural state, with the exception of a strange sound once or twice emitted. A fourth clyster which was thrown up brought off some excrement nowise unusual in its appearance. After remaining for two hours, the mustard cataplasms were removed, and it was found that they had produced a beginning derivation to the surface, the parts being highly reddened, but without any vesication. Some colour now appeared in the face, and she seemed to be much better. The starting of the limbs recurred less frequently, and at twelve I considered her out of danger. The skin was moist, and the body having much more of the natural heat; the pulse still about 125 or 130. We then relaxed in the application of the stimulant remedies, and, on leaving her to the charge of an assistant for about twenty minutes, on my return I found she had continued the same, another clyster having been administered in my absence, without any dejection following. She was to all appearance as a person in a state of sound sleep, breathing easily, with the countenance a little flushed, and the convulsive motions affecting her at longer intervals. Seeing now no farther occasion for a continuance of that practice which we had all along pursued, I recommended that she should not be disturbed, and warm flannels only applied from time to time to the trunk and lower extremities.

By the account of a sensible attendant who sat by her, she continued in the same profound sleep, without any manifest change, unless that a considerable perspiration broke out, until twenty minutes past five next morning, when she first opened her eyelids, and turned the eye in the orbit, seeming to look around her without any consciousness of perception. She then fell back again, and dozed until a quarter before seven, when suddenly starting up she threw down the bed-clothes, calling out at the same time to take them off from

from her, and seemed perfectly sensible. Being supported on the side of the bedstead, she vomited up more of the fungi than would have filled two moderate-sized teacups, not altered in appearance from the state in which they had been received into the stomach. She then asked for something to drink, and complained much of a soreness of the head and neck, so that she could not swallow. She afterwards vomited more, and retched a good deal, without any matter being discharged. When I saw her in the morning, the pulse beat 120 strokes in the minute, weak but regular. Some tea was offered her, which she would not take. Two drachms of the compound powder of jalap were ordered, a third to be taken every hour until the bowels should be freely moved, and infusion of tamarinds for drink. The two first doses of the powder were vomited a short time after being taken, and the tamarinds she could not be induced to use. In the course of the day she took some wine and water, and, as no evacuation of the bowels had been procured, a clyster of senna and Glauber's salts was administered, which produced a stool rather fetid, and having an evident intermixture of the fungi, with the laminæ entire. She ate nothing all the 10th, and the belly continued loose, each stool containing some portion of the mushroom in an undigested state, and she was affected every now and then in the course of the day with involuntary motions of the lower extremities. Thirst considerable, pulse in the afternoon 110. During the night she slept nearly as usual, but was frequently affected with startings. On the 11th she took some breakfast with considerable appetite; pulse 100, small. During the two succeeding days she continued pretty well, but on the 14th the pulse was irregular, and she had been passing still some remains of the mushroom; a laxative being given, which produced several evacuations, she continued free from complaint.

A brother of the above, a boy of eight years of age, had eaten one on the Friday, but after dinner; and, before five the same evening, he was seized with vomiting, and the fungus being rejected no bad consequence ensued. Another brother, of nine years, had eaten also one, and during the night was affected with soreness of the belly; but, notwithstanding he had taken some more on the ensuing day, he was not attacked with any bad symptoms, as in the case of his sister.

James Boath, of four years, had also eaten some on Friday quite raw, but the quantity was unknown. About seven in the evening of the same day, he was seized with pain of the belly, which continued during the whole of next day, until an emetic which he took on Sunday brought off the fungi with

with the membrane covering the upper part, and apparently in the same state as when swallowed.

James Tuck, aged three years, ate some of the same species in the wood on Friday. He was taken ill the same evening, vomited and purged much, belly swollen and tense, and cold sweats broke out on different parts of the surface, and the body in general felt below the standard temperature of health, and was affected with great thirst. He went about, however, on Saturday, and ate some more, and was taken ill again in the evening with vomiting and purging; and, an emetic of ipecacuanha being given, a quantity of the fungi was discharged, but for several days after he loathed his food. His elder brother, Stephen, ate one; but an emetic having been administered, no bad consequences ensued.

In one only of the cases, that of Boath, did the poison produce a permanent effect. During all the winter the boy suffered from a diarrhœa, and frequent convulsive affections, particularly of the superior extremities and face; he became emaciated and pale, and lost all relish for food. In the course of the last summer he has regained his health, and is now quite stout.

The species of mushroom which had been used by all the children is that described by Lightfoot in his *Flora Scotica*, under the title of *Muscarius*, and now flourishes in our woods in great abundance. It is a beautiful fungus, and the tallest to be met with, of a red colour at top, with small specks of a whitish matter, the remains of the involucrum, which surrounds the whole before it shoots from under the turf. It is almost insipid; and, in this respect as well as in its general appearance, differs widely from another species, the *Integer*, which also grows in great plenty in our neighbourhood, and in the same situations as the muscarius. The colour of the integer is purple, or sometimes inclining to crimson, of a most pungent biting taste, so much so that the sensation remains on the tongue for many hours after its application. This species, which I should conceive from its sensible qualities to be the more deleterious, had not been taken in the smallest quantity; and the effects exemplified in the case of Isabel Thorne, (as above narrated,) are to be referred entirely to the other species, the muscarius. The practice employed in her case was such as the symptoms suggested; but, if hereafter a similar one should occur, I should certainly carry the use of stimulants to a greater extent, and have recourse at first to the warm bath, the benefit of which was particularly conspicuous. Perhaps stronger emetics might have been used, and a flexible tube would have forwarded greatly the exhibition of our internal means. In such cases

where the powers of the system are low, and the introduction of medicines by the mouth difficult, might not the pneumatic art be of considerable avail, and the inhalation of stimulating gases affect materially the other means in use? At any rate, remedies possessing the same general virtues, when applied in combination, must be much more powerful than when singly or in succession; and it was with this view, that while all the other avenues (the senses perhaps excepted) by which the system could be affected, the stomach, the skin, and the gut, were taken advantage of, that I ordered the decomposition of the nitrate of potass, by which also the lungs might receive a greater portion of oxygen, and the heart be excited to more vigorous action by its proper stimulus. In some experiments which I made on dogs, with an extract prepared by expression of the fungus, and inspissation of the juice on a slow fire, no manifest noxious effect was induced; a slight purging in one only followed its exhibition.—The aq. ammoniæ used above is a diluted preparation, and sold in the shops under the old name of spirits of hartshorn; it is however pure, and not a carbonate.

Forfar, N. B. JOHN ADAM, jun.
Sept. 21, 1814. Surgeon.

For the Medical and Physical Journal.

Continuation of Mrs. Thomas's Case of Abscess in the Liver, with Dissection;* by Mr. R. SEMPLE.

MAY 13th, 1814.—Her abdomen appears larger than before the last operation, with evident fluctuation. Fæces black and offensive. She had a dose of salts two days ago, which procured eight loose motions. Acute pain in the right side and shoulder. No stool to-day. Makes water freely, and in abundance. Habeat, Sulphat Sodæ ℥i. cras mane.

15th.—This day I proceeded to the operation as before. On introducing the trocar and canula, a discharge of pus, mixed with a little blood, took place, but the canula soon was stopped up, and I was obliged to withdraw the instrument, after having evacuated a few ounces only of the matter. Quiescat, et Habeat, Opii gr. iſs.

16th.—Feels better. No pain in the wound. Passed a good night. Bowels open. Stools dark. Repet. Opium, horâ somni.

18th.—Habeat, Sulphat Sodæ ℥j. statim.

22d.—At eleven o'clock this morning, another surgeon of

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* Vide Med. and Phys. Journal, No. 179, vol. xxxi. page 8.

this

this town accompanied me to the work-house, when it was determined to perform the operation as before. I therefore punctured the abdomen in the linea alba, mid-way between the pubes and umbilicus, with a large-sized canula and trocar, and evacuated by measure upwards of two gallons of good conditioned pus, free from smell. During the operation, several gelatinous bodies similar to hydatids obstructed the passage of the matter through the canula. The probe and forceps soon removed these substances, and the matter flowed copiously. The patient bore the operation well, and complained of no particular uneasiness, save when pressure was applied to the region of the liver. A slight hæmorrhagé ensued when the canula was withdrawn: perhaps some small branch of an artery might have been wounded, and did not shew itself, till the pressure of the canula was removed. It, however, soon stopped. The health, pulse, and spirits, have, since the last operation, been good. Indeed no function, but the liver's secretion, seemed in any way to be depraved. Her bowels have been seldom moved, without the aid of laxatives. After the operation, I ordered the following medicine:

℞. Tinct. Opii M. xl.

Aq. Menth. Pip. ℥iſs. M. fiat haustus statim sumendus.

At five o'clock in the evening I saw her. She appeared cheerful, and, upon the whole, free from pain. She had eaten some lamb and spinage with relish. Her countenance was expressive of much satisfaction at the success of the operation. The assistance I experienced from Mr. William Hole, the medical gentleman above alluded to, was of material service to me in the performance of the operation. I ordered her draught to be repeated at eight o'clock in the evening, with thirty minims of the Tinctura Opii.

As I have published part of this case already in the Medical and Physical Journal, I hold it right to make the result of it known. It is an interesting and important case. It was at one time suggested to me, that the matter might have been contained in the sheath of the rectus muscle; but its being diffused all over the abdomen, its quantity, &c. removed entirely that supposition.

May 23d.—Passed a comfortable night. No pain in the wound. Tongue clean. Pulse good. Bowels rather confined. Hab. Sulphat Sodæ ℥j. statim.

24th.—Salts operated. Feels comfortable, and is better than I could have expected. She has every kind of nourishment, with wine and porter. No pain in the wound. Quiescat.

29th.—Symptoms of hysteria.

℞. Gum. Ferulæ Assæ-Fœtidæ gr. xv. Divide in pilulas duas; statim sumendas.

31st.—Removed the plaister, and found the wound healed up. Voided much urine this morning. Belly soft, and breathing free. Tongue clean. Bowels confined. Sits up, and eats well. Sumat omni nocte Pilulæ Hydrargyri gr. vj.

June 12th.—Bowels very loose, and the motions mixed with scybalæ, and tinged with blood. Slight ptyalism Habeat Extracti Opii gr. ij. h. s.

16th.—Mouth sore. Slept well. Rep. Opium Capiat Pilulæ Hydrargyri gr. iij. 4ta quaque nocte tantum.

24th.—Mouth well.—Has had the opium since last report. Hab. Sulph. Sodæ ʒifs. statim. Omittantur alia medicamenta.

25th.—Salts procured about twelve motions, slimy, scybalous, and mixed with blood.

26th.—Has had a great number of bilious stools since last report. Feels easier. Belly soft. Habeat Extracti Opii gr. ifs. horâ somni.

27th.—Says she feels great relief from the opium, urgently wishing it to be continued. Purging stopt. Makes abundance of urine. Rep. Opium.

July 2d.—Teeth loose. Ptyalism inconsiderable. Says her stomach rejects all ingesta, and is only allayed by the opium. Repet. Opium.

14th.—Her breasts, which were formerly flaccid, have this morning swelled. Belly enlarging apace. Mouth well. Continuetur opium.

22d.—Legs swollen, erysipelatous, and painful.

℞. Superacetat. Plumb. ℈j.
Aquæ Puræ ℔ij. Solve. Humectentur crura frequenter more solito. Rep. Opium.

August 11th.—A small pustular tumour is observed on the cicatrix where the last operation was performed. Continuentur Medicamenta.

12th.—The small tumour burst, and about an ounce of pus was discharged. It does not appear to communicate with the abdominal cavity. Continuentur Medicam. Applicetur Emplastrum Adhæsivum parti.

18th.—Hysteria.

℞. Gum. Assæ-Fœtid. ℈fs. divide in pilulas duas, statim sumendas.

19th.—Says she has been very ill during the night. The place where the puncture was made, last operation, discharges a small quantity of pus. Hab. Extr. Opii gr. ij. horâ somni.

22d.—Passed two large potsful of thin matter, which she could

could not well describe, and the nurse had emptied the vessels. Belly softer. Augeatur dosis Opii ad gr. iiss.

28d.—The quantity of watery fetid matter which she passes per anum is incredible. Has changed in her countenance for the worse. Repetatur Opium.

September 17th.—She has gradually sunk, and her faculties have remained entire, and she this afternoon, without a struggle, expired.

Dissection.—September 19th, 1814.—I first drew off with the canula and trocar about a gallon and a half of good conditioned pus, and then divided the parietes of the abdomen in the usual manner. The first thing that presented itself to me was a general blush of inflammation on the surface of the abdominal viscera; and on pulling aside the flaps of the abdominal parietes, a considerable quantity of the same kind of matter which I had drawn off by the instrument appeared. This I sponged clean out, and discovered an immense cavity filling the chief part of the hypogastric region, reaching as high as the diaphragm, and lying immediately under the liver. This last viscus, together with the gall bladder, were to all appearance sound and healthy, and on cutting into the substance of the liver, it was found free from disease. The bag of the tumour did not communicate with any viscus of the abdomen. Under the bag of the tumour lay the uterus and bladder, in a sound and healthy state. The internal surface of the sac or bag of the tumour was interspersed with several black spots, and a hydatid of a very enormous size was found slightly attached to its lower part. The sac adhered firmly to the circumjacent parts; it was about the fifth of an inch in thickness, and of a capacity to contain about three gallons. It extended from ilium to ilium. The ovaria and fallopian tubes were to all appearance sound. Except this bag of purulent matter, and the inflammatory appearance already described, no other symptoms of disease were discernible in the abdominal cavity. As this woman had never complained of any pain or uneasiness in the thorax, that cavity was not opened.

My idea of this disease being an abscess in the liver, was, perhaps, a justifiable one, from the tumour lying immediately under that viscus. The cavity of this abscess having no communication with any of the viscera, and its immediate connection and adhesion to the integuments of the abdomen, renders it extremely possible that a permanent opening externally might have been beneficial. I proposed the operation some time previous to her decease, but she objected to it, and delayed her compliance till it was too late.

I may

I may here remark, that so prevalent was the supposition that this woman was with child, that my assistant was asked by the porter's wife at the work-house lodge, after the dissection, whether this circumstance was not true.

ROBERT SEMPLE,
Member of the Royal College of Surgeons in London.
85, *High-street, Islington;*
Sept. 22, 1814.

For the Medical and Physical Journal.

Observations on Chronic Diarrhœa, arising from an Ulcerated State of the Intestines; by JOHN GORHAM, M.D.

THE subjects of this disease are found in the lower classes of society, and it is most frequently met with in hospital practice. Having had several opportunities of witnessing its progress, and, after death, of ascertaining by dissection the morbid changes in the intestines, on which it depended, I have thought that a concise account of its symptoms, and of the influence of medicine in relieving them, might, perhaps, afford some useful hints to those who are entrusted with the medical department of such public institutions.

The disease is generally confirmed before the patient is admitted; and the physician can do little more than record protracted sufferings and a fatal termination. The most prominent symptom is a purging, more or less severe: the stools are thin and frothy, sometimes slimy, small in quantity, and occasionally mixed with blood, and rarely with pus. The discharge is preceded by pain about the umbilicus, and frequently succeeded by violent straining and tenesmus. The number of discharges varies exceedingly in different cases, but in all it is increased at night. The pulse is in some moderately full and frequent, in others small and quick; the skin is dry and husky; the tongue either dry, parched, and covered with a thin whitish crust, or clean and moist; a clammy or bitterish taste is frequently perceived; the thirst is always urgent; the appetite for the most part is much impaired, but in a few cases it has been good until within a few days of death. With these symptoms are usually joined those of dyspepsia, such as eructations, a sense of fulness and of weight about the præcordia, heartburn, and occasional pain and vomiting after eating.

As the disease advances, the countenance becomes sallow and sharp, the fat in the cellular membrane is gradually absorbed, and the body exhibits great emaciation; the patient complains of considerable debility; slight rigors are experienced,

rienced, followed by flushings of the face; pains are felt about the neck and shoulders, and a stiffness is perceived in the lower extremities; serous effusions take place first in the feet, and the œdema extends along the legs even to the penis and scrotum. These are followed by ascites and hydrothorax, and in one case I have seen the effusion even in the face and upper extremities. At this period the urine is scanty, high-coloured, and deposits on standing a flocculent mucous substance, or a greyish white, sometimes a reddish sediment in considerable quantities. The lips lose their colour, the countenance is meagre and pale, or saturnine and of a waxy appearance; difficulty of respiration harasses the patient; the debility becomes extreme; and a miserable existence is at length terminated from the effects of pain, inanition, and universal dropsy.

These symptoms vary greatly in degree in different cases. In all, the purging is the most obvious and most constant; but in some, the appearances of effusion into the cavities of the abdomen and thorax are wanting; and in others, the quantity of blood discharged is small, and there have been no indications of pus.

On repeated dissections, the following morbid changes have been observed.

The muscles were thin: they had nearly lost their red colour, and had the appearance of having been macerated. Serous fluid issued from the cellular texture. The abdomen contained a yellowish translucid fluid, varying in quantity in different cases. The liver was generally shrunk, the gall-bladder distended, although the ducts were pervious, and the spleen and mesenteric glands were enlarged. The stomach, duodenum, jejunum, and part of the ileum, were often found without any peculiar marks of disease; but in one or two instances, all these portions of the alimentary canal exhibited erosions of the internal coat. For the most part, the seat of the disease has been in the lower portion of the ileum, in the cœcum and the colon almost to the rectum. When these parts were examined, a number of erosions or ulcerations were discovered, varying in extent from one line to more than an inch in diameter, the villous coat in all having been destroyed, and in some even the muscular fibres of the middle coat. I have generally found these ulcers to be most numerous at or near the junctions of the ileum and colon with the cœcum. The number, however, varied in different cases. In some, there were but a few of a large size, while in others they were exceedingly multiplied. The edges of these ulcers were slightly elevated, jagged, and irregular, and

and a diffused redness appeared in the peritoneal coat immediately over them. Their surfaces were usually covered with a tenacious mucus, and sometimes, though rarely, the intestine around and the peritoneal covering were sphacelated. The engraving of these ulcers, given in the works of Dr. Stark, is very accurate.* From the long continued purging in this disease, it might be supposed that the intestines would contain nothing but flatus, but, in several cases, the cœcum and part of the colon were found filled, though not distended, with dark-coloured tenacious fæces of an intolerable odour. In two cases, lumbrici were discovered in the ilium.

The origin of this disease can generally be traced to exposure to cold. The subjects of it are those who are addicted to the immoderate use of ardent spirits, and who, while intoxicated, have been exposed to the vicissitudes of the seasons, or to the night air, without any other protection from the weather than their clothes. It may, however, be produced by other causes more immediately applied to the internal surfaces of the intestines. Highly acrid substances, or drastic purgatives taken into the stomach, may bring on hyper-catharsis and inflammation, which shall terminate in ulceration; and I have now under my care a deplorable case of this disease, the consequence of confiding in the promises, and taking the medicines, of a notorious empyric.

This complaint is of a chronic nature. Its progress is slow, and it gradually wastes the body of the patient by almost imperceptible degrees. Its usual period, particularly when the most prominent symptoms have been in some measure alleviated by appropriate medicine, is from one to four years. It is commonly, if not uniformly, fatal; and this unfortunate termination is to be accounted for, not only from the nature and seat of the disease itself, but also from its being frequently complicated with organic affections of the other abdominal viscera.

From its seat, it is obvious that the diseased part must be continually irritated by the application of substances taken into the stomach as food, but which, from the imperfect state in which the functions of that organ are performed, are not completely digested. By their stimulant operation, they increase the natural motion of the muscular fibres: this action is probably communicated to the exhalents and mucous follicles, by which a larger quantity of fluid is poured into the

* Stark's Works, 4to. London, 1788.

intestines,

intestines, and the discharge, if not continually increasing, is at least rendered permanent. From the impossibility of making any direct application to the ulcerated surface, we are prevented from using the only means which could be successful; and when we add to this the previous habits of the patient, and the probability that there exists disease in some or all of the other chylopoietic viscera, we shall not be at a loss to account for its fatality. Such morbid changes in the abdominal organs, independent of those in the intestines, I have frequently observed. In one case, ulcerations about the cœcum were accompanied with extensive disease around the pyloric orifice of the stomach; in a second, with a singular change of structure in the liver, the substance of which appeared to have burst its investing membrane in a great number of places, and to have been protruded, resembling a liver which has been long boiled; in a third, with an abscess between the rectum and the posterior portion of the uterus, which was ulcerated and laid open. The appendix cœci adhered closely to the walls of the abscess, and had allowed the passage of a lumbricus from the intestine to the uterus, in the cavity of which it was coiled; for this appendix penetrated into the abscess: when examined, it was found open at both ends, and its bore corresponded with the diameter of the worm. In a fourth case, which was that of a maniac, this disease was complicated with inflammation of the intestines and peritoneum, with large biliary concretions, and with a sphacelus of one portion of the ilium, through which a lumbricus had penetrated into the cavity of the abdomen. With such alterations in structure, and such obvious derangement of functions, as were indicated by the symptoms, and exhibited in the examinations, of these cases, it is apparent that no mitigation, and much less a cure, could be expected from medicine.

As this disease of the intestines arises from an inflammation of their internal coat, it is probable, that, if properly treated at its commencement, it might in most cases be speedily removed. But after it has afflicted the patient for weeks, or months, it can no longer be regarded as enteritis; and it will be found by experience, that, in general, the only indication to be kept in view is to palliate the symptoms, and render the condition of the patient less miserable.

I shall briefly mention the medicines which have been administered for the purpose, either of effecting a cure, or of restraining the discharge, and the result of their action.

Opium.—When this narcotic is given alone, it at first relieves the pain and moderates the discharge in a very considerable degree, and the patient is enlivened with the pleasing

idea that his health will soon be restored. The same effect is produced by injections of mucilaginous liquids mixed with the tincture of opium. The influence of this medicine on the diarrhœa, however, is rarely perceptible beyond a week or ten days, and to produce any degree of alleviation, the dose requires to be rapidly augmented. A habit of taking this drug is thus soon established. The person, while the system is excited by it, is rendered comparatively comfortable; but, during the intervals, the debility is great, and existence becomes a burthen. The only benefit to be derived from its use, is that of relieving pain, and procuring a few hours of unrefreshing sleep.

Ipecacuanha and Antimony.—In those cases where the pulse has been full and frequent, the skin hot and dry, and the strength not much reduced, an emetic of ipecacuanha, followed by small and frequently repeated doses of the same root, has had a beneficial effect by determining to the skin, lessening the quantity of fluids poured into the intestines, and weakening the peristaltic motion.

Of the preparations of antimony, the vitrified oxide with wax, recommended by Dr. Stark, has produced the best effect. In was given in a dose of five grains, combined with one of opium, every sixth hour. In one case, it suspended the discharge and rendered the bowels regular for nearly two months. The patient began to recover his strength and appetite, and I anticipated a cure, but the flux returned, and the man died. This case, as I ascertained by dissection, was an ulcerated state of the intestines, apparently unconnected with disease of any other of the abdominal viscera, notwithstanding large serous effusions had taken place in the cavities and the cellular texture.

I have seen a great abatement of all the symptoms follow the use of the warm bath and subsequent frictions. By this mode, and by the use of opium and astringent medicines, one patient was so much relieved, that could the former have been continued, which, from certain circumstances, was quite impracticable, it is probable that a cure might have been effected. This method is best adapted to the disease while recent.

Purgatives—So far as my experience extends, the use of this class of medicines is injurious. When the dyspeptic symptoms have been troublesome, a temporary benefit has been derived from the exhibition of rhubarb in powder, or in tincture. The latter, perhaps, is preferable.

Tonics and Astringents.—Cinchona and the bitters have had little influence in checking the progress of this disease. The former, in the state of powder, is injurious, as it always increases

increases the number of discharges, and often augments the pain.

Of all the medicines which I have tried, the astringents appear to have had the greatest effect in restraining the profuse diarrhœa.

Of those from the vegetable kingdom, I have most generally employed Kino and Extract of Catechu, in the form of tincture, that of the former being combined with tincture of opium, in the proportion of an ounce of the one, to a half or a whole drachm of the other.

Among the metallic tonics and astringents, the acetate of lead and the sulphate of zinc, have operated most favourably on this disease. The former should be combined with opium, or with this narcotic and root of ipecacuanha, as in the following formula:

℞. Pulveris, Radicis Ipecacuanhæ, gr. xii.
Acetatis Plumbi.
Pulveris Opii. ana. gr. ix.
Mucilaginis. G. Mimosæ niloticæ, quantum satis sit m. fiat massa, in pillulas duodecim æquales dividenda, quarum unam omni sexta hora, capiat.

The quantity of acetate of lead and of opium may soon be augmented to one grain in each pill, but the use of this metallic salt should not be long continued.

The sulphate of zinc may be conveniently exhibited, dissolved in a decoction of the wood of quassia, or the bark of cascarilla.

Quicksilver.—The submuriate, the only preparation of this powerful stimulant which I have exhibited, has never, to my knowledge, produced the least favourable effect on the disease, or the least remission in the severity of the symptoms. It has been given alone, in combination with opium, and with opium and ipecacuanha, until it excited ptyalism, without any benefit being perceived to result from its action.

Blistering over the abdomen has sometimes had a temporary good effect, and perhaps a perpetual blister, a seton, or an issue, might be permanently useful, but neither of these has been tried.

I shall now close these brief observations, with a very few remarks on the diet best calculated for those afflicted with this disease. It should be nourishing, and at the same time composed of those substances which are of easy digestion, and which are not much disposed to become ascescent, such as tender meats, eggs, milk, jellies, and simple soups. Except in protracted cases, the functions of the stomach are rarely so far deranged as to prevent the digestion of animal food; and it is only in the advanced stages that a true

ientery comes on, and the food can be perceived to constitute a part of the alvine dejections. The drink should consist of whey and diluted wine or brandy. Vegetable food in general, and all fermented liquors, such as cyder, beer, and ale, should be avoided, as they uniformly produce a sense of fulness and distension in the abdomen, and augment the number of discharges.—*New-England Journal.*

For the Medical and Physical Journal.

On the Effects of the Eau Medicinale, of Elaterium, and of Purgatives, in the Cure of Gout; by T. Sutton, M.D.

I PERCEIVE my letter on Mr. Want's discovery of the composition of the Eau Medicinale, has been inserted by him in the Medical and Physical Journal, for the purpose of making his remarks on it. He appears to be much displeased that I have maintained, so far as he can comprehend, the infallibility of purgatives, in the cure of gout, through the whole paper; but is not surprised to find that I consider them to be as efficacious in this disease as his favourite medicine, because I either am, or appear to be, ignorant of the virtues of the latter. Mr. Want might, however, have readily saved himself the trouble of asserting, that I was "totally unacquainted with that curative property of the eau medicinale to which he alludes, or the sensible effects of that remedy," by adverting to one part of my paper, which he could not, I presume, have readily overlooked, where I have stated, that "these (advantages of the French medicine) appeared to me to be effected in the most material and permanent degree by a powerful action on the bowels, although it certainly more immediately allays the violence of pain by its anodyne quality."

My Tract on Gout expressly points out three ways of subduing a paroxysm of this disease,—by purging, by the use of anodynes, and by cold applied to the part affected. I have considered the cure by the use of purgatives to be the most perfect, combined either with anodynes, or by giving an anodyne after their operation. The latter mode of proceeding is exemplified by the case related in my Tract on Gout, page 202; and I also judged that the operation of the eau medicinale in the cure of the gout, was most efficient in those cases where it acted on the bowels. I always thought the beneficial effects of this medicine in gout to consist in an anodyne, or soothing, and purgative quality, and therefore recommended elaterium and opium to imitate them to this extent. I could not be insensible of the powers of an anodyne

dyne to subdue a fit of the gout, for in page 213 I have given a case of the most complete submission of the paroxysm of this disease to the use of laudanum; and in page 267 I have stated that similar effects resulted from the use of opium. I had not, therefore, overlooked Mr. Want's favourite quality of the eau medicinale exactly to the extent with which he was willing to impress his readers, nor was I ignorant of the analogous and beneficial effects of other medicines in imitation of this quality. This supposed want of information, therefore, on my part, not being so very complete as he has stated, I do not find that Mr. Want has written any thing to invalidate my intimation, that the eau medicinale possesses "no greater (beneficial) efficacy in curing the gout than many known remedies," and "that we possess a numerous class of medicines which are equally as capable of subduing the paroxysms of gout as the eau medicinale."

Mr. Want states, that the beneficial properties of the eau medicinale, or of the colchicum autumnale, for the cure of gout, are quite distinct, from its purgative powers. That he, however, should refer all the good in the gout to these properties alone, is rather singular, when he admits that purgatives exercise a beneficial influence on the disease, although he infers, that they fail oftener than the eau medicinale or his preparation. The soothing powers, however, of the eau medicinale, of opium, and of cold applied to the parts affected, are in this respect analogous in effect, that they suspend the paroxysms; but I contend, that they do not exercise over the disease so powerful and effectual an ascendancy as to reduce the cause of gout to a long subjugation of its influence on the system, or entirely to overcome it. The former of these, the use of purgatives, properly administered, with attention to some few other circumstances, will, in most cases, effect; and the latter appears to me to be often attainable.

I have taken this opportunity to examine the facts that inclined me to consider the eau medicinale to be a purgative. I find, from Dr. Jones's account, that Huson recommended it "from a view to its evacuating powers;" (vide Jones on the Eau Medicinale d'Huson, page 6th;) and, from his own observation (Dr. Jones's) "that sometimes it produces no evacuation at all; at others, it proves powerfully emetic and cathartic." Out of twenty patients mentioned by Dr. Jones, who took the French medicine, four were not purged, three very moderately, and eleven powerfully. In Mr. Stanhope's case, it remains doubtful whether the bowels were affected or not; and in one there is no notice taken of the operation of the medicine in any other way than that it relieved the paroxysm of gout. Among those on which the eau medicinale

cinale acted powerfully, is included the case of Sir Joseph Banks. Dr. Jones states, "forty-eight hours after Sir Joseph had taken the first dose, the remaining part of the bottle was administered, and, in the course of the next twelve hours, the medicine began to operate, and procured five evacuations." Mr. Want says, "Sir Joseph assures me, that in him the eau medicinale never produces any action on the bowels, while it never fails to relieve him."

Mr. Want, I find, in several instances, has made use of italics for the purpose of drawing the attention of his readers to several points in his assertions which have a reference to me, and which he has not omitted to do on the subject of his claim to the credit of first using powerful purgatives, especially elaterium, for the cure of the paroxysms of gout. He has, however, done me the favour to state, that he first employed these medicines in the year 1811, which will readily give me an opportunity of deciding the question between him and me on this subject. Whether the purgative effects of the eau medicinale, or those which tend to lull the pain or keep in check the paroxysm of gout, shall be considered to be the properties in which the chief virtues of this medicine reside for the cure of the disease, it is extremely evident, that Dr. Jones's book affords, at least, ten cases in which it caused a powerful action on the intestines. And, if we admit Mr. Want's opinion, which it is not necessary here to contend about, it must be evident, at least negatively, in reading these cases, that the operation of powerful purging was not attended with detriment. My experience of the efficacy of cathartics in gout, to the extent to which I had then employed them, led me to conclude that the purgative effects of the eau medicinale were desirable and beneficial in that disease. It was with these impressions I first advanced to the recommendation of a powerful cathartic action on the bowels in the paroxysms of this disorder; and I can safely affirm that I had used medicines to produce this effect previous to June 1810, and that I had communicated my opinion of their efficacy to some medical friends, and at a meeting of a society called the Kent Medical Society, which is composed of medical men from town or its vicinity; that I communicated the prescription of elaterium and opium for the cure of gout to many of the members, either at the May or June meeting, 1810. In June of the same year, I attended a patient with Dr. Heberden at Chesilhurst, where the effects of the eau medicinale on gout was the subject of conversation. Dr. Heberden there said he had seen Huson's book, and I mentioned to him my preparation as a substitute for the eau medicinale, wrote it down, and gave it to him.

The formula was two grains of elaterium, and sixty drops of tincture of opium, in an infusion of ginger. In Sept. 1810, I was attacked with gout, and employed purgatives with the most marked success. I transmitted my case to Dr. Lettsom for the Medical Society in Fleet-street, of which he was president; and it was read at some of its meetings before Christmas 1810, as Dr. Lettsom informed me by letter. In the beginning of 1811 I transmitted another letter to Dr. Lettsom for the Society, communicating two cases of the efficacy of elaterium in the cure of gout, by Mr. Green of Lewisham; whether these were read or not, I cannot vouch. From this statement, it must be evident, that I had communicated my opinions of the advantages of elaterium and other purgatives, through different channels, before Mr. Want ever thought of using them. I cannot say whether he afterwards employed them, through suggestions arising in his own mind, or in consequence of any hints he might have received, and which he has forgotten. But, in so far as the priority of claims to the use of these medicines exists, between Mr. Want and myself, I believe I have said sufficient to decide the question.

I do not pretend to account for Mr. Want's failures in the use of cathartics for the cure of gout; I have only related such results as have occurred to me during four years' practice in the use of these medicines; and Mr. Want's communications hitherto on the subject of the eau medicinale, and of his composition as a substitute for it, have only given me a more lively and satisfactory conviction, that I have performed a most essential service to the public in recommending a cure for gout chiefly grounded on the operation of purgatives, and I doubt not that it will survive all the different speculations on the cure of that disease, or the various remedies which have been of late proposed, not excepting the eau medicinale or the colchicum autumnale.

If we were only to rely on the eau medicinale, or Mr. Want's preparation, many cases of gout would occur which must be left unaided, because it would be next to madness to think of administering such compositions in them. I have had occasion frequently to see a lady who has for years been a great martyr to the gout, and who is never attacked with this disease without its being attended with great sickness and costiveness. Previous to her taking cathartic medicines, paroxysms of gout so accompanied have continued with her for a considerable time, and she has been confined to her bed, or her room, when so affected, for six weeks and upwards. This state of disease is now soon dissipated, and the gout vanishes, as soon as the bowels can be got to act in a relaxed manner,

manner, which is generally effected in two or three days, should there be room for the exhibition of the eau medicinale in such a case as this, yet the disease soon yields to the use of purgatives.

A gentleman who had laboured under several severe and tedious fits of the gout, was attacked with hemiplegia. At the time I am speaking of, this was the second attack of paralysis. The disease now indicated much determination to the head, and was accompanied by a great loss of power on the side affected, as well as of a considerable affection of the speech. About ten days after this attack, at which time the patient had shewn some signs of the probability of recovering the use of his limbs to a considerable extent, a fit of the gout came on. It must be evident to every one, if this disease continued so long as it had usually done in former attacks, that the progress in amendment, in so far as it respected the paralytic affection, must be much retarded; and it was also probable, by an inactivity of some duration, that the period might pass over in which so desirable an object could to any extent be accomplished. Under these circumstances, as I could place much confidence in the powers of purgatives over the gout, I recommended the attending surgeon to administer a powerful medicine of that sort: it produced an appropriate effect, and the gout was subdued. From this time, eighteen months ago, the patient has enjoyed a freedom from this disease, and has regained the use of his limbs to full as great an extent as could, at any time, have been anticipated. This also, I presume, may be ranked as a case in which the eau medicinale could not with propriety have been advised. No other medicines could have been eligible for the cure of gout in these two cases, it is therefore I have related them; but there are many others which can be overcome by the use of this class of medicines, sometimes with the occasional aid of opium, and at other times without it, in which such a medicine as the eau medicinale could not be thought of.

In all my trials with the use of purgatives for the cure of gout, I have the satisfaction to know, that not one circumstance has occurred to throw a suspicion on the propriety of the practice, in regard either to the immediate or ulterior state of the patient, nor of dissatisfaction respecting its results, excepting the case before remarked. In regard to the eau medicinale, it has happened otherwise. Several of those with whom I have conversed, have grown tired of the medicine, because it has afforded them only a short reprieve, without a thorough restoration of healthy feelings, and therefore they have determined to submit to a severe fit of the gout, to be able, even for a short time, to attain to a more perfect

perfect state of health. From medical men, also from many quarters, I hear of patients who have taken the French medicine, whose health and appetite have been impaired, and who have not only lost all confidence in the eau medicinale, but who have regretted exceedingly their ever having employed it. Dr. Gregory, of Edinburgh, believes he has had one patient who died in consequence of taking this medicine, by producing a violent action on the bowels, and another who was attacked with water in the chest two successive times, after he had taken the same medicine. In two cases after the use of this nostrum, I have seen obstinate constipation to ensue, in one of which the disease ended in death, and in the other case, the bowels could not be brought to act for several days. Mr. Ring and Dr. Adams have each of them, I believe, seen a fatal case from the use of this composition.

With what different sensations must a practitioner prescribe such remedies as purgatives for the cure of gout, which when exhibited in this disease, unless very much mismanaged, can produce no untoward symptom; and when he approaches the bed-side of a patient with a medicine which, granting Mr. Want's preparation and the eau medicinale to be the same, is, according to him, "endued with properties most unmanageable and deleterious," and which, in one instance, in spite of all Mr. Want's address, nearly cost the patient his life. "He has (also) seen cases in which it produces a most alarming sense of suffocation, from the globus hystericus, and flatulent distension of the abdomen." When we go on farther with this comparison, we shall find, after this deleterious drug has been administered, that "out of forty patients, in several instances no return of the disease has taken place for several months." Among those who have confided in purgatives, however, for the cure of gout, I can adduce those who have enjoyed health and freedom from disease for a much longer period, among whom I have the happiness to include myself, who have now been free from the gout for upwards of four years.

As this paper has now extended to a considerable length, I shall not dwell on the least important part of Mr. Want's controversy with me, whether he has discovered the composition of the eau medicinale or not. I, however, hope he has, and I have so far changed my opinion under that impression, as to hope also that the discovery will be of considerable advantage to the public, by an inverse proceeding, however, to that which Mr. Want has aimed at. It can now, I apprehend, no longer be contended, that the knowledge of the composition of a nostrum is of none or very

little consequence to those who recommend it, since, admitting Mr. Want's discovery, we find that the public has been presented, in the form of the French medicine, with an unmanageable and pernicious drug, which, although a solitary or unfrequent use of it, in a moderate dose, may not draw down most serious and baneful effects upon the system in every case, because of the admirable powers which are connected with our existence to resist to a certain extent things which operate to its destruction, yet it cannot be supposed that the frequent use of this deleterious plant can ever act in concurrence with the entire and perfect health of the human frame. If there are paroxysms of gout which this medicine can controul better than any other, which I doubt, let it be given to that extent, and then let the powers of purgatives complete the work of restoration. In this limited way such medicines may be admissible, and in this way also the eau medicinale or Mr. Want's composition will leave less deleterious effects on the system. For, whatever may be maintained to the contrary, it must appear evident, that it would be desirable to throw such a medicine out of the habit, so soon as can be done after it has effected its beneficial purposes, and that the purging powers of this drug are adapted, if to effect no other good, to ward off the unhappy consequences that might ensue from its continuance in the habit. Mr. Want has even admitted that some of the alarming effects of this medicine are prevented, when it takes to operate on the bowels, for, after enumerating some serious symptoms brought on by the colchicum autumnale, when it does not act by purging, he adds, "though most commonly in a full dose it has this effect (purging), which, if it does take place, immediately removes the sense of suffocation."

It was the unlimited recommendation of this medicine to the public, and in a popular publication, which induced me to notice Mr. Want's supposed discovery as I have done; while at the same time he avoided giving any intimation of the benefits of a class of medicines of great efficacy and powers, in controuling and in curing the gout; and, however Mr. Want may have failed in their use, he cannot help mentioning them with commendation. But let it be remarked, that the tendency of his first paper on this subject had in view to recommend exclusively his composition; for, in the Monthly Magazine, he introduces his discovery, by announcing it to be a "very important preparation;" he recommends its use on account of its cheapness to persons in the labouring class of the community, who on account of the high price of the eau medicinale were not able to obtain it; and he hints that the unwillingness of the profession to introduce the French nostrum,

nostrum, has been owing to its being a secret medicine, which will be removed by his discovery; and, lastly, although he acknowledges that his composition is unmanageable and deleterious, he states that "he has used it, at least in forty cases, with the most satisfactory results." If my notice of Mr. Want's paper will be followed by no other advantages, it will make more extensively known the use and benefits of purgatives in gout, and acquaint the public, that the gouty may have a chance of losing the disease, without having recourse to a medicine that may bring with it more serious evils than it is capable of driving away. I however find that Mr. Want has been more limited in recommendation of his preparation, in his reply to me. For in that he says, "I simply state that this medicine does that which the eau medicinale is capable of performing, and I recommend it to those only who have experienced the good effects of that remedy." If Mr. Want had held out no other inducement beyond the last for its use, I should certainly not have been at the pains of taking notice of his discovery, nor should I have made any observations at all on his communication, if it had appeared in a Medical Journal as announced and published in the Monthly Magazine. I judged it to have a direct tendency to fix the public mind to the exclusive use of a drug for the cure of gout, which its admirers cannot consider, in many points of view, with commendation.

Lastly, as Mr. Want is become the legitimate defender of the eau medicinale, and of his discovery, though only, as I presume, with a view to public usefulness, I would recommend him to solicit from all quarters communications to be addressed to him, on the effects of the French medicine and his own, in so far as they may have appeared to be detrimental, either on their immediate use, or at a subsequent period. Such information will, I should hope, have a tendency to fix the public mind, as to the propriety of confiding in, or giving countenance to, medicines possessing noxious qualities, for the cure of the gout; while their superior efficacy, if any, in their quicker operation, and the certainty of the relief they afford, does not much exceed a mode of cure perfectly safe in itself, and which also possesses the advantages of a more extensive application, connected with the probability of more permanent benefits.

Croom's Hill, Greenwich, THO. SUTTON.
Sept. 10, 1814.

P. S.—*October* 1.—I perceive Mr. Want has stated as follows in a communication in the Medical and Physical Journal of the present month: "It was observed by Dr. Sutton,

that the eau medicinale produced its beneficial effects by its purgative operation; and distinctly asserts, that even common purgatives are capable of removing the disease with equal facility. For the complete refutation of both these assertions, I (Mr. Want) may refer to our last Number, where the subject is considered at length." Mr. Want has no more completely proved, I beg to assert, that common purgatives are not capable of removing a fit of the gout, than he has proved that he employed purgatives and elaterium before me. Both rest upon his assertion: the latter I have completely refuted, but cannot do so with the former, otherwise than by referring to my communications and tract on Gout. This then must depend on the relative credit we enjoy with the public.

Letter addressed to Dr. SUTTON.

SIR,—On perusing Mr. Want's answer to your remarks upon the preparation of a medicine which he conceives to be the true eau medicinale, he says, he is perfectly convinced, from the united testimony of several distinguished literary characters, that the two compositions are identically the same. Mr. Want needed not their testimony, if he had acknowledged the having obtained a specimen of the plant* from which the French remedy was prepared, (this Mr. W. stated at a meeting of the Westminster Medical Society, in Windmill-street, during the last winter,) it having been given him by the housekeeper of the preparer or vender of that medicine, during his attendance upon her. This, I think, is *conclusive*, as to the identity of the two remedies. Before Mr. W. is allowed the discovery of the remedy, it remains with him to prove his use of it prior to his attendance on the person alluded to. Being unwilling to enter into any discussion, I merely send you this fact, well known to the members who were present upon that occasion, to use in any way you think proper.

Sept. 9, 1814. *An occasional Visitor of the Society.*

FROM THE EDITOR.

* Were this statement correct, Mr. Want feels that he should not only deserve the execration of the public for having practised a gross fraud upon them, but should have betrayed a *pitiable weakness* in attempting to assume the credit of a discovery, in defiance of a public declaration of his want of title to it, before a crowded society of students and practitioners, who could not fail to strip him of his borrowed plumes, and expose him to merited derision.—The answer to Dr. S. and his anonymous informant is in the hands of the printer; but it has been thought adviseable to defer it, on account of the pressure of matter more interesting to the profession than controversial squabbles.

For

For the Medical and Physical Journal.

Case of Aneurism of the Heart, with Perforation in the Walls of the Auricle.—Journ. de Med.

MR. N., whilst riding at full gallop, felt a pain in the right side of the chest, as if he had received a blow on this part. In the evening his respiration was difficult, but he supped heartily, and slept well. At midnight his sleep was suddenly interrupted by a noise like that made by a saw; he awoke his wife, who laid at his side; she distinctly heard the same noise, but was at a loss to know whence it arose; she got up, and found that as she removed from her husband it diminished, and *vice versâ;* at last they discovered that it was seated in his chest. On applying the hand to the region of the heart, strong pulsations were felt. In this situation he remained many days. The difficulty of breathing increases as he ascends the staircase. He complains of a feeling of anguish in the epigastrium, with vertigo, head-ach, flushings of the face, palpitations, and discovers great uneasiness for his fate.

Being called in consultation at the end of September, I examined him attentively. Striking the right side of the chest, it gave a dull sound throughout its whole extent. The pulse is strong, full, and *without irregularity.* The patient lies either on the back or the sides; if he walks quickly, his respiration is affected. Conceiving this to be an aneurism of the ventricles of the heart, I ordered him to be bled, and leeches to be applied to the anus, with mild aperient remedies. He had pediluvia and baths for the anus. I prescribed for him the digitalis purpurea, with an antispasmodic draught, and advised him to abstain from exercise, wine, and spirituous liquors, and to be sparing in his diet. About January a cough arose, which was relieved by ordinary medicines, and he was somewhat better for the first two months after the commencement of this treatment.

About the beginning of April, the oppression at the chest became stronger, he was more extenuated, the lips were of a bluish colour, his cough returned with great distress, and the expectoration was frequently bloody; he could not move without experiencing the most violent palpitation, extreme uneasiness in the chest, and imminent suffocation; he complained of very acute pain along the passage of the carotid, radial, crural, and popliteal, arteries; his pulse was uniform, but weak; and he grew daily worse. In the last week of the same month, he did not get the smallest rest; if his eye-

eye-lids closed, and he began to sleep, he was immediately awaked tormented by frightful dreams, or threatened with suffocation; nor could he remain two succeeding minutes in the same situation. The evening preceding his death, his agitation and anguish was inexpressible; I never before witnessed such suffering. His expectoration was black, and his urine also; his pulse was now unequal and small; the extremities of his fingers and toes were livid; he fell occasionally into a state of lipothymia, and asked for opium to relieve his pains. On the 30th of April he died.

Dissection.—The chest being opened, I found the pericardium dilated, thinner than usual, and filled with black blood; the heart very large, and its vessels distended with blood. The ventricles contained a large quantity of polypous concretions. Their parieties were thick, and not unhealthy; the right auricle very thin, and twice its natural size, had a small perforation in it, through which doubtless the blood had escaped into the pericardium; the left was also dilated, though not to the same extent; the greatest part of the septum ventriculorum was destroyed; the sigmoid valve was ossified; the right lung loaded with black blood, which in some parts was extravasated into its substance; the left lung was less disorganized; no effusion was found in the chest.

For the Medical and Physical Journal.

Narrative of the Poisoning of One Hundred and Eighty Persons, by the Berries of Belladonna; by M. GAULTIER.

ON the 14th of September, 1813, a detachment of some hundreds of men of the 12th regiment of infantry, arrived at a hill where unfortunately a group of plants grew, since recognised to be the Atropa Belladonna. Thirsty from a long march, the soldiers fell upon these plants, and soon stripped them of their fruits, some of which were of a deep red colour, whilst others had a violet tint, which was an indication of their ripeness. In vain some persons, who knew the danger of eating them, dissuaded them from it. Some took six or eight, others twelve, others fifty, and some still more. In two hours time the regiment quitted this position, but already 160 of these wretched beings experienced the deleterious effect of the poison. Some expired on the spot where they were gathered, others a little distance from it; others were dragged by their comrades into the neighbouring woods, or wandered there themselves. It was then two o'clock in the afternoon.

Our division, though but a little way off, was not acquainted with this event until the following morning at day-break. A number of the men who were poisoned came to our bivouac, where it was observed they evinced a degree of idiotism; many others were brought in by our patroles. On the evening of the 15th I saw fifteen of them brought in by an officer from the wood. On the 16th, at noon, I saw thirty more, who returned tolerably well, and among them two only could give me an account of the symptoms they had experienced. The first was a young soldier, who had eaten ten or twelve berries: he said he had, in two hours after, such a confusion of sight, that all objects appeared to him to be covered with hay. He could not keep himself erect, but fell to the ground, and as fast as he rose he fell again. He felt a sinking at the stomach, with nausea. The hips, tongue, and palate, were parched. He could not swallow the little particle of saliva that moistened his mouth. It appeared to him that the sides of his throat were in contact, and that he was going to die. Soon every thing appeared to go round him, and he thought he saw no objects but through a thick cloud; then he passed four or five hours in a manner of which he can give no account. The exertion he made, with the assistance of his comrades, brought him gradually about. I saw him forty hours after the accident in perfect health, during which time he had no evacuation from the bowels, which could be considered the consequence of, or operate as a crisis of the accident.

The second patient I interrogated was a sergeant, about forty years old. At first he attempted to dissuade the others from eating, but at length followed their example. He took himself a dozen berries. He fell upon his knees in the ranks, rose, and fell again several times. He had nausea, as in the foregoing instance; his head seemed not to fit his shoulders. Remembering then that he was poisoned, he took, though not without difficulty, some bread, and four green and very sour apples. An hour after, he drank a tumbler of milk. He was soon relieved, and, on the following day, nothing remained but a recollection of the danger he had undergone.

The other soldiers who were brought after their recovery, were stupid, debilitated, and had no recollection of the accident: they had all been deprived of their reason. As to the sixty, and some we had occasion to bring in, they passed the first night in the wood in the middle of a marsh, during a very cold and moist season. Many among them passed a second night there. These unfortunate wretches were almost all bareheaded, without shoes or coat, with their pantaloons about their heels as if they had been to stool; but there was no appearance

pearance of fæces on the shirts or pantaloons. All without exception had haggard and staring eyes, suffused conjunctiva, the pupil dilated to a very great degree and immoveable. Their vision was confused, and gave them a false idea of objects. They were in continual agitation. Their knees sunk under the weight of the body, inclining them forwards, and carrying their trembling hands towards the earth, endeavoured to collect little stones and bits of wood, which they always let fall or threw away, to recommence the same pursuit.

The pulse, which I observed only in some, was small, weak, and rather slow than accelerated; but I place no dependance on this symptom, as it occurred in subjects who had been much debilitated by an abstinence of thirty-six hours, with cold and rain, to which they had been exposed naked. Almost all carried on their faces, heads, hands, and arms, the bloody marks of their rencounter with trees, thorns, and rocks, among which they had been drawn, or had fallen; many of those who passed the nights of the 15th and 16th, made a constant noise, crying out at every moment *to arms!* spoke of the Cossacks, &c. and, perceiving our fires through the trees, came bruised and torn upon our advanced guard, and were with great difficulty prevented from throwing themselves into the flames. The symptoms have been so similar in all the cases, that their enumeration will be sufficient to establish the pathognomonic character of of the effect of this poison. In recapitulation we may mention the following: dilatation and immoveableness of the pupil; almost absolute insensibility of the eye to the presence of external objects, or at least confused vision; suffusion of the conjunctiva; prominence of the eyes, which in some are dull, in others shining, ardent, and furious; dryness of the lips, tongue, palate, and throat; deglutition difficult or impossible; nausea, not followed by vomiting; debility; lipothymia; difficulty or impossibility of keeping the erect position; frequent bending of the body forward; continual motion of the hands and fingers; lively delirium, with empty grins; loss of voice, or confused sounds uttered with difficulty, probably tenesmus; gradual recovery of health, without recollection of the preceding circumstances.

This unfortunate event somewhat resembles that which happened near two thousand years ago to the army of ten thousand. When it returned from the expedition undertaken by the young Cyrus against Artaxerxes, and approached Trezibonda, a strange accident befel them, which caused a great consternation among the troops, and is thus described by Xenophon:—As there were many bee-hives in the place, the

the soldiers began to eat the honey; after which they were seized with a purging upwards and downwards, followed by delirium; the least affected resembled drunken persons, whilst others were quite furious, and appeared in dying circumstances. The earth was strewed with bodies, as after a defeat; none, however, died: the symptoms ceased on the following day, the men being somewhat weakened by it. Diodorus Siculus relates the same fact, but neither he nor Xenophon give any account of the plant which gave this deleterious impregnation to the honey.

Dioscorides and Pliny have spoken of a poisoned honey found near Heraclea Pontis. Those who eat of it were driven mad. Dioscorides makes no mention of the suspected plant; but Pliny says the honey is gathered from a plant named Ægolethron: and a little farther he observes, the bees collect it from the flowers of Rhododendron.

Tournefort having found the Azalée Pontique and the Rhododendron in great quantity near Trezibonda, has discovered that the honey which poisoned the ten thousand could be nothing but that gathered from the flowers of these plants, and particularly from the former.

Cases illustrative of the Modus Operandi of Colchicum in the Cure of Gout; by Mr. WANT.

IN our last Number, I related two cases of Gout, cured by Colchicum, selected from many others equally successful, because they furnished evidence of the fact, that its curative power is quite unconnected with its purgative quality. I subjoin three more, where the relief was either anterior to the purgative operation, or where no such effect was produced. To strengthen the evidence of these five cases, if it be necessary, I may observe, that the uniform result of my observation, since my first use of the remedy, has been in favour of the inference which I have drawn from them; but, not anticipating the possibility of a dispute concerning facts so obvious, I took no pains to preserve the memoranda with sufficient accuracy for the public tribunal, until these five cases occurred in immediate succession.

As it is my intention to publish very fully on the subject of Gout, and on the efficiency of the various remedies suitable to its different species, I shall not at present enlarge upon the precise application of the Colchicum; but it is incumbent on me to warn my medical brethren, that the utility of a medicine will ever be in proportion to the skilfulness of its administration. If any should fail in the use of it, and failure must inevitably be the case in the hands of some, let

not the want of success be hastily laid to the charge of the remedy. If any substance be entitled to the denomination of a specific, it can only be so when properly employed. However valuable it may be, yet, if applied without sufficient discrimination of the circumstances of the case, or attention to the constitution of the patient, it may prove useless; and, in proportion to the strength of its operation on the human body, may manifest a deleterious effect.

Case I.—Mr. Porter, of Leigh-street, Burton Crescent, applied to me on Wednesday evening, the 12th. He was then labouring under a severe fit of gout in the right hand. For reasons which it is unnecessary to state, the medicine was taken in a very moderate dose, about nine in the evening, and directed to be repeated in eight hours. On the following morning the two doses had been taken, the pain was considerably abated, *though no evacuation had taken place from the bowels*, and it gradually decreased towards evening. I had left directions to repeat the medicine in the same quantity if it were deemed necessary; but, the pain being very trifling, only one dose was given in the evening. On the morrow the pain was extinct, but the medicine had then produced sickness and purging; on Saturday he was quite free from gout. Mr. P. expressed to me his convictions that, had not the disease been attacked by this medicine, the paroxysms would have increased in severity, as he had been accustomed to experience on former attacks.

This gentleman has formerly taken the Eau Medicinale to the extent of 36 bottles, but it produced no sensible effect on him, excepting that of perspiration, though it always removed the paroxysm. The relief from Colchicum was precisely the same, though it was thought not to be so speedy; but this may be accounted for in two ways. In the first place the dose was very small; had a medium quantity been given, a single dose might have been sufficient to remove the pain in the usual time, though it might still be short of that which could operate on the bowels; or the disease, from its longer continuance, or other circumstances, might require a fuller dose for its cure.

Case II.—Mr. Dingell, landlord of the public-house at the corner of Tavistock-place, Little Coram-street, sent to me on Tuesday evening. The pain was confined to the foot and ancle; he took the Colchicum immediately. On the following morning I called, but did not see him; I believe he was from home; but Mrs. D. assured me he was quite free from pain, and that *no operation on the stomach or bowels had been occasioned by the medicine.*

A circumstance in the case of this patient may deserve to

be

be recorded. In the intervals of the paroxysms a large and hard tumour is perceived in the ham; but, on their invasion, it invariably begins to soften and diminish, until it is scarcely perceptible.

In my paper published in the Number for September 1811, I advocate the cause of the humoral pathology, in opposition to Cullen and his disciples. Is not this tumour one among many other proofs of the existence of morbific matter?

Case III.—Ann Ellis, 23, Chapel-place, Little Coram-street, came under my care at the Northern Dispensary for a severe scald. She was unhappily labouring at the same time under gout, to which she has been these five years subject. The last time she was laid up with it, *she took medicines without effect for the space of three months.* I saw her, and gave her the medicine, which she took at ten o'clock on Friday evening, the 14th. The pain was fixed in the hip and toe, had been in the elbow, and was coming on in the hands; in the toe and the elbow, it was attended with great swelling; this is never seen in the hip, but the pain is excruciating there. At two o'clock, on getting out of bed, she found the toe was nearly well, and was able to stand; the pain continued a little in the hip; in the morning, at ten, it was quite gone. At the time of noting this account (Sunday morning) she is quite well, and has walked to my house in the Crescent without any difficulty; the pain in the toe was considerably relieved *before any evacuation from the bowels:* she says, if it had not been so she could not have stood upon it. The only motion in the night was after *the relief from pain in the toe,* and she had no other till she took her breakfast at ten o'clock in the morning, when she had five more evacuations, which were watery. The operation of the medicine she considered to be mild.

JOHN WANT,
Surgeon to the Northern Dispensary.

North Crescent, Oct. 1814.

COLLECTANEA MEDICA.

Case of Tænia in an Infant, cured by Decoction of Pomegranate. By William Pollock, M.D. Communicated by Adam Burt, M.D. Superintending Surgeon, Bengal.

I FORMERLY communicated to you some cases of tænia, cured by the pomegranate decoction, which were inserted by Dr. Fleming in his Catalogue of Indian Medicinal Plants and Drugs, printed in 1810, and, since that period, I have found the remedy invariably successful, in a very great number of instances. In

many of those the tænia had acquired an enormous length, and in some of them it was received in tepid water, and lived for several hours after it was passed. The following case occurring in an infant, not two months weaned, appeared to me to be very remarkable, in consequence of which I reported it to you, and also sent a copy of it to Dr. Fleming, at the time it happened. That it is a very uncommon occurrence, may be inferred from an observation of Dr. Hamilton's, in his most valuable work on purgative medicines, where he says, that the tænia is altogether unknown in infancy and childhood.

Peter Daly, aged fourteen months. 27th August, 1811. Was weaned about two months ago, and has since been gradually drooping, in consequence, as was supposed, of dentition. He is now excessively reduced, refuses all food, and is harassed with a constant troublesome diarrhœa. His skin is loose, dry, and shrivelled, and he has the whining fretful cry of a child who has been long sick. Different medicines have been prescribed for this diarrhœa without relief, and for several days his stools have contained small fleshy shreds, some of which considerably resemble half-dissolved portions of the tape-worm. Two ounces of water were added to six of a decoction of the pomegranate root, (prepared by boiling two ounces of its fresh bark in a pound of water to nine ounces,) and a table spoonful was ordered to be given the child every half hour, unless sickness and vomiting intervened.

28th.—He took the whole of his medicine yesterday, without either sickness or vomiting, and in the evening he passed a portion of tape-worm alive, upwards of six feet long. The medicine purged him briskly, and to-day he has vomited almost every thing he has taken. Appearing much exhausted, an anodyne carminative mixture was ordered to be given at intervals, to relieve the sickness.

29th.—Appears more lively; has had no vomiting since yesterday, and the diarrhœa has been much restrained by the anodyne. Quiescat.

1st September.—Is manifestly better in every respect, but his stools still contain portions of the tape-worm. Eight ounces of the above decoction, without dilution, were ordered to be given in the same manner as before.

2d.—He took the whole of his medicine yesterday, without either sickness or vomiting, and with but little effect upon his bowels, until this morning, when it began to purge him briskly, and he passed another portion of the tape-worm, nearly eight feet long. He has been very hungry, and ate a hearty breakfast.

25th.—No portions of the tape-worm have been observed since last report, and the diarrhœa gradually left him, without the use of any other medicine. His bowels have become regular, his appetite keen, and he has filled up apace. He has the appearance of a healthy thriving child, and his strength has improved so rapidly, that he has now begun to walk.

From the above period he continued to thrive until August 1812, when

when he again began to pass pieces of the tape-worm. The pomegranate decoction was repeated, and he passed an entire tænia alive, fifteen feet long, since which he has been in perfect health, and is at this moment a very fine boy. He is son of Edward Daly, private soldier in his Majesty's 53d regiment.—*Edin. Med. and Surg. Journal.*

Observations on Pemphigus. By Dr. DICKSON, Physician and Inspector of the Fleet, &c. on the North-American Station.

CASE I.—G. Michaloff, ætatis 56, belonging to the Russian fleet, was admitted into the Argonaut, hospital-ship, on the 19th November, 1813, in consequence of a vesicular eruption, of three days standing, which occupied almost every part of the body, but particularly the face, arms, and thighs. The vesicles were largest upon the thighs; but they were of every size, from a pea to that of a walnut, irregularly circumscribed, but generally oblong, and filled with a straw-coloured transparent fluid. Some of them were broken, and had discharged a large quantity of serum. The pulse was 110, the heat somewhat increased, but the tongue moist and clean. He was directed to take a purgative, and to be put into the tepid bath. To avoid repetition, I shall confine my observations chiefly to the progress of the eruption, and content myself with remarking generally, that the febrile symptoms were mild, and the functions nearly natural; and that the only treatment indicated throughout the disease consisted of the occasional exhibition of a purgative, and some saline antimonial medicine, with a wash for his eyes; and mild dressings, after bathing the excoriated parts in tepid water.

20th.—Many of the old vesicles are broken, and several new ones have appeared. There are some of a small size upon the eye-lids and tarsi, and the eye-lids are inflamed. He complains only of the soreness of the excoriated parts; appetite and spirits good.

21st.—The vesicles on the eye-lids are ruptured; the tunica conjunctiva is much inflamed, and the exposure to light causes a copious flow of scalding tears.

22d.—As the old eruptions burst, new ones appear in various parts of the body. The ophthalmy has increased, the tarsi are swollen and ulcerated, and there is a copious agglutinating discharge which prevents the opening of the eye-lids, until bathed with milk and water.

23d.—Few new vesicles have occurred since yesterday. He feels very sore; and the excoriated places secrete a copious purulent discharge.

24th.—The eye-lids are closed and swollen, and there is a considerable puriform discharge; but no farther vesications have appeared. After this date no new vesicles formed; and the sores, after discharging considerably, dried up by degrees, leaving the skin of a deep red colour. On the 1st January, 1814, he was discharged; but was sent back again to the hospital-ship in about a fortnight;

fortnight, in consequence of several small blisters having risen on the scrotum and penis. They were not, however, larger than a pea, and soon healed; and, no new vesicles having appeared on any other part, he was, after some time, finally dismissed. The skin retained a mottled appearance, from deep red patches of various dimensions.

He was not sensible of any indisposition before the eruption took place. He stated that he had been affected with the same complaint sixteen years ago, but was not aware of any cause, nor of having seen any one else with the same disease.

CASE II.—J. Plusnin, ætatis 39, also a Russian, of a spare habit, was received into the Argonaut, on the 23d of November, 1813, labouring under fever, from which he was nearly recovered, when, on the 1st of January, 1814, some small vesicles were observed at the bend of the arm, where venesection had been performed. The pulse, skin, and tongue, were nearly natural.

2d.—He yesterday took a purgative. Some eruptions have appeared farther up the arm, and upon other parts of the body, which, on breaking, discharge a lemon-coloured serum.

6th.—Since the 2d, vesicles have continued to appear, and they are now general over the body, and upon the head, where they are very large. On the body, though most frequently the magnitude of a nut, they are of every size, from a pea to a walnut. The eyes, as in the case preceding, are much inflamed.

10th.—The hairy scalp is almost covered with large bullæ, which, bursting, discharge an astonishing quantity of glutinous fluid, forming, when dry, an incrustation very difficult to remove. There are also many small blisters in the mouth, which give great pain; particularly those on the edges, and under the tongue. He cannot bear the light for an instant; and the attempt to open the eye-lids causes a copious flood of tears, by the acrimony of which the tarsi and cheeks are red and excoriated. The pulse, however, is only 85.

11th.—No fresh eruptions have appeared; many of the older vesications are dried, and covered with an incrustation; but others still discharge copiously, particularly those on the scalp, from which it is so profuse as to wet his night-cap and pillow-case in a very short time; the edges of the tongue are much ulcerated.

12th.—He feels very sore, and the excoriations are so general and extensive as to make every position irksome. He cannot allow his eyes to be inspected. The pulse is 100, and he is low; but takes some arrow-root and wine.

14th.—There were no new vesicles yesterday, but three have since appeared on the neck. The pulse is 80 in the morning, but considerably quicker in the evening.

15th.—No farther eruption; but the general irritation and soreness are very distressing, and the discharge continues copious, particularly about the joints, and from the parts upon which he presses; the eyelids are closed, ulcerated, and much swelled.

16th P.M.—The pulse rises in the evening at 110, and he feels very

very sore and feeble; but no fresh vesications have arisen. From this period that the eruption ceased, his health and strength declined; and the exacerbations in the evening increased. It was vainly attempted to support his strength by a more nourishing diet, wine, a decoction of bark, and by opiates to procure rest. Notwithstanding every attention paid to his unfortunate case by Dr. Douglas, the surgeon of the hospital-ship, he became every day more feeble and emaciated, and died on the 29th of January, perfectly exhausted and worn out by the sufferings caused by the irritation, soreness, and discharge. Although some marks of disease were discovered on dissection, and particularly in the thorax, yet the viscera in general were much sounder than they were usually found in those who had died of fever, or its consequences. The small intestines, however, contained a yellow, glairy, gelatinous-looking matter; and on their outer surface several yellow patches were observed; but it was difficult to determine whether these depended on an exudation of the same fluid between the coats, or upon the peritonæum having been elevated so as to have formed distinct vesicles at an earlier period of the disease. No vesicles were discovered on the inner surface of the intestines, although in some places it looked redder than natural. The contents of the right eye were found destroyed by an abscess, and the cornea of the left was opake and ulcerated; the arm-pits, groins, scrotum, and between the fingers, buttocks, &c. were perfectly raw, like a blistered part; and in other places the skin appeared dried and puckered up, and of a deep purple colour.

Of the third case, likewise a Russian, I did not preserve any account, as fever prevailed to a great extent at the time; and it was divested of interest, by nearly all the vesicles having been ruptured before his admission into the Trusty, hospital-ship. They had been numerous, but were not succeeded by ulceration nor any constitutional symptoms worthy of notice; and he was well again in about a fortnight; the exudation from the vesicated parts generally forming a rough disagreeable brownish incrustation, which gradually peeled off.

The fourth case I did not see, as it occurred between the two periods of sickness, during which I was superintending physician of the Imperial Russian fleet; but I have been favoured with some information respecting it by Mr. Dobson, surgeon of the Trusty, hospital-ship, which I shall give nearly in his own words:

Jacques Jejaurnoy, a French prisoner, ætatis 48, was admitted on the 25th of April, 1813, labouring under cough, purulent expectoration, hectic sweats, and other symptoms of confirmed phthisis pulmonalis. In the night of the 5th of May, after a profuse perspiration, he was annoyed by a troublesome itching of his thighs; and, on putting down his hand to scratch them, he felt several elevations of the cuticle, about the size of a large pea, but paid no farther attention to them at the time. The itching returned the next night, and more vesicles formed; and, on the following morning, the first vesicle broke, as the patient asserted, with an audible

audible noise. After this period some rose on his left side; and on the evening of the 9th, one made its appearance on the left cheek. They continued to form and to burst in various places successively until the 16th of May; subsequently to which date no fresh blebs appeared, though some of the former did not break for several days after that period. The largest, which was upon the thigh, was, on the 14th, about the size of a large nutmeg; on the 15th it had become elongated, and measured an inch and three quarters in length, and about an inch in breadth. It did not appear to be altogether filled with serum; but, as it recovered its elevation, after pressure, seemed to contain a small portion of a gaseous fluid; a circumstance which, if my recollection be not erroneous, is noticed by some writer, and which is agreeable to the etymology of pemphigus.

The appearance of the eruption, as in the second case, seems to have been somewhat critical; for Mr. Dobson mentions, that the man's health and appetite improved so much, and the phthisical symptoms were so far suspended for a time, that he felt a strong inclination to inoculate some other consumptive patients with the fluid, but was deterred by some accounts of the formidable nature of this disease. A smarting sore followed the bursting of the vesications; but there was not any inflammation round their bases; nor did they leave any pits, as they generally became dry in two or three days, and terminated in a brownish-coloured desquamation.

A French assistant-surgeon, who was then in the ship, stated that he tasted the fluid, which was of an acid quality; and that it turned the red threads of the rug upon the bed of the patient, upon which it fell, to a dirty brown colour.—*Edin. Med. and Surg. Journal.*

Memoir upon the compound and smooth or simple Eyes of Insects, and on the Manner in which these two Species of Eyes concur in Vision. By M. MARCEL DE SERRES, Professor of the Sciences in the Imperial University.

(*Continued from p. 322.*)

THE choroid of the compound eyes of insects has been regarded by Swammerdam as an uvea. It would seem, however, that it cannot be called an uvea, as it does not occupy the bottom of the eye of insects. However this may be, this membrane is attached by its circumference to the whole of the edge of the cornea, and consequently follows the contours of this same membrane. It is surrounded by a large circular trachea, in general furnished by the tracheal artery of Swammerdam, but varying as to its arrangement in the different genera. For instance, in the *gryllus* and *truxalis*, it is the third principal division of this same trachea situated in the head, which, when it arrives at the eye, becomes bifurcated, and the two tracheæ which result fasten on the edges of the eye: the latter form the large circular trachea, unite afterwards to the upper part,

part, continuing after this junction in one single trachea, which, by joining to another, afterwards terminates at the base of the brain.

The large circular trachea furnishes an infinite number of very minute tracheæ, which soon becoming bifurcated, form very numerous isosceles triangles which rest on the circumference of the optic cone. These triangles formed by the tracheæ are divided as by a perpendicular, by the nervous filaments resulting from the expansion of the optic nerve. These filaments afterwards pass through the choroid and its opaque varnish, as well as the tunic of the cornea, and terminate below the facets of the last-mentioned membrane. This arrangement of the tracheæ, and of the nervous filaments, forms a handsome network, which is rendered very sensible by carrying the nerve inwards, and on the side of the brain. All these trachæa afterwards continue, and terminate on the choroid. The genera which have no choroid also want the circular trachea.

In the genera which have vesicular tracheæ, like the *lamellicorn coleopteræ*, most of the *lepidopteræ* and *dipteræ*, as well as certain *orthopteræ*, like the *gryllus* and the *truxalis*, we observe considerably under the optic cone another circular trachea, but much smaller than that which surrounds the edge of the cornea. The latter turns around the optic nerve, and is surrounded itself by numerous air pouches, the use of which seems to be, to sustain the optic nerve, and to keep it in its position.

The small circular trachea is wanting in all the genera which do not present pneumatic pouches or vesicular tracheæ: as it appears, however, essential for keeping the nerve in its position, it is replaced by the fibres of the adductor muscle of the mandibles, which on separating wholly surround the optic nerve, and prevent its being put out of place. We cannot say that the muscle in its contractions can act on the nerve by compressing it; for observation proves, that, by placing the muscle in all the contractions of which it is capable, the nerve remains always in its natural position, since the contraction of the muscle is effected longitudinally only, and from front to rear; so that, whatever contraction it undergoes, it can never touch the optic nerve.

The optic nerve formed by the prolongation of the brain is, of all the nerves of the head, the largest and broadest, particularly if we measure it at the place where it spreads. It issues almost always from the lateral and upper surfaces of the brain; but its position with respect to the other nerves furnished by the brain is very variable. According to the species and position of the various parts situated in the head, it is either the third, the fourth, or the fifth, pair of nerves furnished by this organ. The optic nerve at its origin is a little cylindrical, and, directing itself laterally, enters soon after its origin into the small circular trachea when it exists; and, when it does not exist, between the filaments of the adductor muscle of the mandible, which forms a kind of circular aperture for its passage. Gradually this nerve expands, and forms a cone, which has its base on the cornea and its summit on the brain. This expansion is greater or less according to circumstances. The *libel-*

lulæ, the *lamellicorn coleopteræ*, most of the *lepidopteræ*, as well as the *gryllus*, the *truxalis*, and the *mantis*, present it almost the whole length of the cornea; whereas in the greater number of species in which the cornea is not spherical, this breadth is in general much less, and that in a very decided manner. It is from this expansion that a very considerable number of nervous filaments issue, which proceeding between the tracheæ furnished by the large circular trachea, form the network which we have already mentioned. These are the filaments which, traversing the choroid and its varnish, as well as the tunic of the cornea, go to form the particular retina of each facet, each penetrating into the hollow of one of these facets, in order to receive the impression of the light which they transmit to the brain. We see at the exterior of the compound eyes a black point which seems moveable, and the apparent mobility of which is owing to a cause which we shall explain when speaking of vision in general. In order to resume this description, we may observe that, according to the conformation of the compound eyes, the union of the small facets forms altogether the first membrane or transparent cornea, and that, besides, each of these facets may be considered as itself a cornea. The nervous filaments which pass through the tunic of the cornea are probably the particular retina of each facet. As to the tunic with which they are as it were surrounded, and which every where fringe the cornea, its chief use must be to diminish the impression of the luminous rays, an impression the stronger because it takes place in an immediate manner. The blackish varnish which covers the opaque membrane, situated under the tunic of the cornea, may with great probability be assimilated to the varnish of the choroid, as the membrane itself may be to the choroid. Finally, the expansion of the optic nerve applied under the choroid, must be considered with M. Cuvier as a true nervous membrane perfectly similar to that of the red-blooded animals.

After having given a general description of the compound eyes of insects, it only remains for us to describe some peculiarities of organization which different species present.

If we study the compound eye of certain *lamellicorn coleopteræ*, as, for example, that of the *nasicorn geotrupæ* and *silenæ*, we observe that its form is like a heart, and that it is divided into two in its upper part, by the portion of the cranium which supports the horn. The cornea is tolerably thick, and divided, as usual, into hexagonal facets: under this membrane we observe the mucous tunic, the optic filaments, the varnishing of the choroid, and that membrane itself, black like the tunic of the cornea.

The circular trachea exists, and the great optic nerve receives, besides an infinity of other tracheæ, several of which accompany the small optic nerves, and reach the cornea by some subtile ramifications. The roots or principal trunks of the tracheæ are placed under the optic nerve, and are attached in the first instance to the tunic with which it is covered. They derive their origin from a considerable branch adhering below the principal trachea, and surrounded

rounded with other small similar tracheæ. The *geotrupæ*, flying only at sunset, present the same organization in their optic nerve with most of the *lucifugæ*. Their principal retina or great optic nerve approaches nearer to the cornea than in the species which fly about in open day. Thus the eyes of the giant *scarite* become after the death of the insect of a reddish white, and yet they are black when the insect is alive. This whitish colour is owing to an alteration in the tunic of the cornea; but as this alteration does not act upon the mucous varnish of the choroid, the latter remains black, of which we may be convinced on removing the cornea with its tunic. This appearance is also very common in an infinite number of *coleopteræ*, and even in several other families. In general the cornea is very thick in the eyes of the *coleopteræ:* a few only of the *hymenopteræ* (and in particular the *apis violacea*) present this membrane of an equal thickness. When the *coleopteræ* have vesicular tracheæ only, which takes place in almost all the *lamellicorn* insects, they want the circular trachea which generally surrounds the optic nerve. To conclude—the optic nerve is always surrounded with tracheæ even in a considerable number, and these tracheæ form most frequently several vesicles, which leave some interval between them, an interval generally very small. Nevertheless, in the species having the tunic of the cornea of a clear colour, instead of being black, we see on the exterior part of the eye a single point of the same colour corresponding to the aperture through which the optic nerve passes; or rather we distinguish several points, as we shall mention when we come to speak of the butterfly.

(To be continued.)

CRITICAL ANALYSIS

OF RECENT PUBLICATIONS

IN THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

Thoughts on Puerperal Fever, and its Cure by Spirits of Turpentine, illustrated by Cases in the Lying-in Hospital, Dublin; also, Cases of Inflammation and Spasm, cured by the internal and external Exhibition of that Medicine; with Correspondence on the Subject. By JOHN BRENAN, M. D. 8vo. pp. 24. Underwood, 1814.

DAILY observation proves to us the little dependence that is to be placed on medical reasonings; the data upon which we proceed are so unstable in themselves, that it cannot be a matter of surprise to witness the daily fluctuation of opinions seemingly the most indestructible. Upon the degree of credibility due to our author's statements, we cannot give an opinion. That must rest solely

on his character for veracity, or talent for observation. But, admitting the facts here adduced, which we see no reason to doubt, the axe is at once laid to the root of our preconceived notions on the subject of puerperal fever, and of the remedies considered to be necessary for its cure. A disease confessedly inflammatory would naturally be attacked by bleeding and cathartics. Who would have imagined the oil of turpentine, generally supposed to be a highly stimulating remedy, would have proved a specific for it? Should this turn out to be really the case, for "adhuc sub judice lis est," we shall hail the discovery as one of great importance to science; not considering it in connexion with puerperal disease alone, but as opening to us a wide field for observation, and as exemplifying in a striking degree the slender foundation on which the doctrines of the schools are erected.

We regret that the pamphlet before us has been drawn up in a manner so loose as to leave us quite in the dark respecting the *modus operandi* of the substance recommended, or whether any sensible operation is necessary to the relief from pain. Should these observations meet the eye of Dr. B., we hope he will furnish us with further information. We could have wished also to have had a more explicit detail of the symptoms of the several cases related of the successful application of his remedy. Dr. B. considered the cases to be inflammatory. Are the medical gentlemen of Dublin agreed on this subject? Was the disease inflammatory, or *puerperal colic?*

The pamphlet refers to some feelings of irritation between the doctor and some other gentlemen, but we are sorry to find the cause of them has been omitted in this impression; not that we are curious to pry into transactions of a private nature, nor can we justify the publication of libellous opinions affecting the character of individuals; but it is important to know whether the personalities were of a private origin, or the consequence of a refusal on the part of our author's brethren to admit the conclusions deduced from the cases under his observation.

The Puerperal Fever appeared, in the month of December, 1812, at the Lying-in Hospital of Dublin, in great force, and the mortality it occasioned was general; whole wards were swept away; and the medicines given seemed rather to increase than mitigate the disease. The gentlemen connected with the hospital made use of all those means in general estimation for the cure of puerperal fever. The physicians of note in the city very humanely contributed their assistance, and still the mortality shewed no abatement from the opposition of all the learning and experience of those gentlemen; some of whom, as teachers of medicine and writers on disease, are justly esteemed the ornament of their profession, and of high authority through all Europe. From such sources it must have been expected that the sufferers would have done for them all that was ever done for persons so afflicted: and such was the case; for bleedings were tried, blisters were applied, purgations by different medicines were used; and, with all, the malady was no way arrested.

We

We select the author's cases as the only evidence on this subject.

"CASE I.—Margaret Rogers had been bled to the amount of 30 ounces, in two bleedings. She was then sitting up, not being able to bear a supine posture. She was vomiting green and yellow bile incessantly; and the sensibility of the abdomen was such, that she could not bear the most gentle touch of the finger thereon. One of the assistants told me, that he considered effusion to have taken place; and, as this woman was in a rapid state of dissolution, from which no woman similarly affected ever recovered, he wanted to know what I would give her. I told him spirits of turpentine. He started, and asked me, how much. I told him, a table-spoonful. This appeared to him madness: but, as the woman seemed dying, he said I might give a few drops, but that he would not stand by whilst I gave it. Accordingly, at the hour of two, p. m. I gave her three tea-spoonfuls of the spirits of turpentine, in a little water. At five o'clock I returned, and the countenance of the assistant expressed the event: he remarked that the woman was better; and he had the courage to stand by when I gave her a table-spoonful, which he was much astonished did not burn her. He asked her, what she thought it was. She replied, Geneva and water. At nine o'clock we visited her. She lay at her ease. She never vomited from the time she took the turpentine, her abdomen was flaccid, and quite insensible of pain on the pressure of it, though very violent. The next day some pains returned; she took the turpentine; and they ceased. She called for food, and complained of hunger. She never after felt any uneasiness in the region of the uterus. In about four days after she began to spit pus, her pulse sunk, and she died. She was of an asthmatic disposition, and had come from the Lock Hospital, where she took much mercury. The turpentine cured all the symptoms that threatened speedy death. She had no symptom of her puerperal complaint after, and I had put her death down to the bleeding.—This case has been objected to me as unfavourable. I cured all I proposed curing; all her puerperal symptoms disappeared: and I fancy the annals of midwifery does not furnish an instance of such relief, in such circumstances, or of any one cured, or even relieved, when the symptoms went to the extent of her case.

"CASE II.—The second case I interfered with, was Margaret Conolly, servant to Mr. Grogan, of Merrion-square. She had labour for two days, and got the fever: the usual remedy was tried, she was bled twice to the amount of thirty ounces: I suggested to the assistant, the application of the turpentine to her abdomen, which was tense and sore to an exquisite degree: he allowed me to apply it; for the fears he held about it, even as to its external use, were such, as that he would not venture to apply it himself, and he therefore allowed me the privilege of doing any good that might turn out from its application. I poured it on her abdomen, covered with flannel. In about three hours after I saw her, she said I had cured her: her abdomen was as flaccid as when in health, it could bear pressure

pressure to any degree, and her breathing was easy. From this circumstance I saw plainly, that the difficult breathing, for which bleeding is so frequently used, arose from the pressure of the diaphragm upon the lungs, by the inflation of the abdomen, which never relieves the belly, and which always sinks the patient. I gave her two tea-spoonfuls of the turpentine in hot water and sugar, and she said it disagreed with her stomach, (and I think cold water is a better vehicle); the next day her symptoms returned, and she was bled in the morning eighteen ounces, and in the evening eighteen ounces: the day after she begged me to apply the remedy I did before to her; I did so without permission, but for humanity sake; her abdomen became flaccid again, and she felt great relief, and could bear any pressure on it; she said, the only thing she complained of was her heart, but that could not rise: she sunk, but with no distress in the region of the uterus; and after death her abdomen was flat. I put down her death to the bleeding. I must note, that I had no further interference in this case than one permissive act, which relieved her; and one assumed authority, which also relieved her. I think, and I believe they about her think, that, if I had treated her alone, I should have been as fortunate as I have been in what I call worse cases. She was in No. 6, in the inside ward.

"CASE III.—A woman in ward No. 7, her name I know not, she lay next bed to Mrs. Keefe's daughter, who died of the fever; she was seized with head-ach, sore abdomen, and a turning in her stomach: she complained severely, and moaned much. I gave her a table-spoonful of the oleum terebinthinæ, and a sup of water after it. In about fifteen minutes I came to her; she told me she got ease. On coming into the ward the next evening, I went to her bed, and missed her; she was sitting at the fire, very well.

"CASE IV.—A woman in No. 8, who lay next bed to Mr. Allen's servant, of Dame-street, who died, got the symptoms that were the usual forerunners of this disease. I contrived by stealth to give an ounce of the turpentine in some saline mixture. This abated all her pains, and the vomiting: and the consulting doctor, on coming the next day, said nothing was the matter with her. She went home that day; the symptoms returned; a person from the Hospital went to her, bled and blistered, and gave the usual remedies. She died vomiting green bile, with her belly swelled. In this woman I stopped all the symptoms. She lived in Gloster-place, and was a smith's wife.

"CASE V.—Mary Murray, wife to a soldier in the Fermanagh militia, from Kilnese, near Naas, was delivered on Saturday, 12th of the month: on Tuesday the fever set in with her most violently. I was allowed a latitude with this woman, on account of the surprising efficacy of the medicine with Rogers. She had a severe cough, and every time she coughed she screeched with the anguish of her belly, which was insufferably painful to the touch. I applied the turpentine to her abdomen, and gave her a table-spoonful of it in water and sugar. The next day she was free from pain, and able

to

to eat bread and milk for breakfast: she took a drink of cold milk, and got ill as ever. I repeated the turpentine, and applied it to her abdomen. The next day she ate stirabout, and got a relapse from cold beer. She continued very ill till Monday, when the doctor showed her to me as a forlorn case. He showed me the blackness of her hands, which he said was the sure forerunner of death, and that Denman said no woman ever recovered that had it. Another doctor saw her, and agreed that she was one of the patients then moribund. Nothing was ordered for her this day, I suppose from the dreadful state she was in. This was Monday; she was sitting up, vomiting green bile. I gave her an ounce of the turpentine, and repeated it in an hour, and applied it to her belly. The next morning I found her asleep. On Tuesday I gave her castor oil, tinctura sennæ, and two drachms of the turpentine in the draught. This purged her much. On Wednesday she breakfasted on stirabout and milk; on Thursday did the same; on Friday she sat all day at the fire, and was put with the next case I shall mention, to sleep in one bed. On Saturday she requested to be left in the Hospital, and on Sunday she walked home to Berwick-street with her child in her arms. This woman was never bled.

"CASE VI.—Bridget Cullen, servant to Mr. Ennis, of Kingston, near Rathfarnham, was delivered of twins, on Saturday, 12th of February: she had hard labour, and took ill on the couch. On Wednesday following she got severely ill with head-ach, turning of her stomach, and continued so all night; the next day she became a matter of serious consideration, and she had the turpentine applied to her belly by means of flannel sopped in it, and got a table-spoonful by the mouth. In about two hours after she began to roar with the pain of her abdomen: the flannel was removed, and it acted as a severe rubefacient: in some hours after she felt herself at ease: the next day her pains returned, and she got the turpentine internally, a table-spoonful; she occasionally got it for three or four days; and on the 25th she was put into the same bed with Mary Murray, above mentioned, and on the 26th went home very well. This is a very strongly marked case; and it must be here noted, that she was not bled."

"The above cases I treated in the course of about three weeks, in the Lying-in Hospital. I hope the efficacy of the medicine is as fully established to be a specific by these, as by any given number: but I shall mention a few other instances wherein turpentine was exhibited with equally wonderful effect.—Mary-Anne F. had heated herself by washing, and to cool herself she stood with her bed-gown open before a window, and a cold breeze; in a few hours after she was seized with violent pain in the abdomen, and showed all the symptoms of violent inflammation. Her face was livid, pulse small, and panting for breath. I chanced to come into the house, and found her as ill as I thought possible. I bled her to the amount of twelve ounces, and went to the next apothecary and got some spirits of turpentine: I gave her a table-spoonful undiluted, and had her stuped.

stuped. I repeated the turpentine in about two hours, when the violence subsided, and gradually vanished. She was perfectly well in two or three days. This case occurred in the house of Dr. Wade, the celebrated botanist; a gentleman to whose liberality I am singularly indebted for furthering the reputation of my discovery.

"A child of the cook of the Chief Baron, living in Gordon's-lane, had been playing in the rain during Sunday. On Monday he was seized with pain in his bowels that convulsed him, and his mother thought he was dying. A lady, a friend of mine, in the house, sent for two ounces of the spirits of turpentine, and gave him half of it undiluted. On my coming in, I saw the child in great agony, his knees drawn to his mouth, and screaming with pain. They told me what was done, and said, that a few minutes ago his abdomen seemed drawn into his back. I immediately gave him the remainder of the turpentine, and put him into a warm bath, in which he was not five minutes when he called to be taken out of it; his bowels gave way; his pains ceased; he fell asleep. His fever manifested itself the next day. He lay for a week, and recovered by the ordinary treatment.

"The Rev. Mr. K., curate of Francis-street chapel, had been called to see a woman who had left the Lying-in Hospital through fear of the fever. She became so ill, that she sent for a clergyman. Mr. K. attended her, and declared that her anguish was such, from pain of the abdomen, that the persons present, nor himself, did not think she could live one hour. He knew I had left town that day; and, as she could not be worse, he took courage and gave her three tea-spoonfuls of the spirits of turpentine. He called next morning and asked, "Was the woman dead?" He was answered by herself, "No, sir; I feel myself quite easy. I got relief immediately from the medicine you gave me, and I slept well all the night."

"The infant of Mrs. B. had been visited by the attending accoucheur with another physician, both men of eminence. They declared the child to have trismus nascentium, or nine-day fits, confirmed. The jaw was quite stiff. I ordered the infant an injection, and added half a drachm of the spirits of turpentine. On seeing the child the next day, they were much astonished to see a change that they never saw in one with that disease: the trismus had disappeared, and the child got well."

The author adds three letters in confirmation of his opinion, which we subjoin.

From Mr. Wigglesworth.

"To JOHN BRENAN.

"As thou desirest that I should mention to thee my case, as nearly as I can recollect I shall do so.

"In the beginning of the first month I was in a delicate state of health; and, going from a warm room into a cold vault at night, I was seized the next morn, whilst in bed, with violent pain in the bowels. I took castor oil and different things for it; still the pain continued, and I was obliged to get out of bed and roll on the floor

through agony. At four o'clock thou camest to me, at which time thou found me in great anguish. Thou observed to Richard Pim, who was in the room, I will now show thee what turpentine can do.

"Thou ordered me two small bottles. At half past four I took one of them; I felt instant relief; I fell asleep, and never felt pain after. At eight o'clock thou came out from dinner: I told thee what I just mentioned. Thou observed, that the pain might return about four o'clock, and in that case thou directed me to take the other draught. I felt a slight return of the pain: I took the draught, as thou desired, and I never felt uneasiness after.

"*City Quay*, 35. JOHN WIGGLESWORTH."

From Dr. Burns, of Glasgow.

"*Glasgow, July* 20, 1814.

"SIR,—I have been favoured with yours of the 15th, together with your pamphlet on the use of turpentine in Puerperal Fever. In reply to your question, I have no hesitation in saying, that I believe the employment of that remedy in such cases is new.

"From observing the excellent effect of turpentine when given to my horse as a remedy for colic, and from a knowledge of its safety in the human species, when exhibited for the cure of tenia, I have considered it as a remedy deserving trial in spasmodic affections of the bowels: but I confess I would not have thought of employing it where there was any reason to suspect the existence of inflammation.

"Your trials prove, at least, that it is not injurious in that state of the intestine which exists in Puerperal Fever. But I should like to know whether it has ever been given early, and trusted to alone, with decided success.

"As I am anxious for the advancement of my profession, and deem it my duty to attend to every suggestion for improvement, I should wish to be favoured with any well-marked case, substantiating the efficacy of turpentine.

"I have the honour to be your very obedient servant,

"*To Dr. Brenan,* JOHN BURNS."
161, *Great Britain-street, Dublin.*"

From Dr. Douglas.

"50, *Great Britain-street; August* 2, 1814.

"SIR,—I beg leave to state, that I find more difficulty in commencing an answer to your letter on account of the terms in which you have spoken of myself, than from any hesitation I feel in lending my slender sanction to pronounce your discovery of the utility of turpentine, in the cure of Puerperal Fever, to be worthy of the attention of every physician who is not so absurd as to think that the profession has already arrived at an acmé of perfection.

"It is probable, however, that, like many other great discoveries, it will be little esteemed in its native country, until after it shall have received the sanction of foreign nations.

"There is scarcely a person who does not know that Peruvian bark is justly esteemed a specific for intermittent fever, but every

person is not competent to administer it, as its doses and the periods of giving it must be varied according to circumstances. Neither can it be expected, although turpentine were admitted to be a specific for Puerperal Fever, that every accoucheur should know by rule of thumb, either the most proper periods, or the necessary repetitions for its administration. And, likewise, as there are required adjumenta to bark, in the cure of intermittent fever, so are there required adjumenta to turpentine in the cure of puerperal fever.

"If you expect to receive from me a detail of cases, you will be disappointed, as I do not keep notes of my practice. I have several cases, however, in my recollection, in which I administered the turpentine with the most gratifying results. And I can even positively assert, that I never yet ordered it to any patient who did not recover. If any person should suppose that my senses may have deceived me, I can refer him to living tests, some of whom can speak to what medicine they themselves, as well as I, attribute their recovery. I have the honour to remain your obedient servant,

"*To Dr. Brenan.* JOHN C. DOUGLAS."

Two Cases, with Observations, demonstrative of the Powers of Nature to reunite Parts which have been, by accident, totally separated from the Animal System. By WILLIAM BALFOUR, M.D. Edinburgh.

IN a preceding Review we had occasion to remark how little dependance is to be placed on medical reasonings. The pamphlet before us is an additional proof of the fact, and illustrates the necessity of guarding against the influence of theoretical opinions, unless clearly deduced from actual and indubitable observation. A short time ago, the man who in his practice calculated upon the *possibility* of uniting parts of an animal body *totally separated from each other*, would have been considered an ideot, and, should he attempt to prove the stability of his principles by argument, would pass unnoticed as a madman. There is not wanting both direct and collateral evidence in support of Dr. Balfour's statements; but we are so apt to discredit what we cannot explain, that the truth of all similar statements has been roundly denied.

Upon this principle Garangeot's story of the soldier whose nose was *bitten off and replaced with perfect union*, is ridiculed by Mr. John Bell; but let it be observed, this gentleman is equally sceptical with regard to the generally-admitted fact of the union of the tooth with the cock's comb, satisfactorily demonstrated by Mr. John Hunter, and the proof of which is to be found in many anatomical museums.*

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* Since writing the above we understand Mr. Bell, in a subsequent edition of his book on Wounds, has retracted the latter of these opinions.

Mr.

Garengeot's case is thus related by him, and is intended to show the possibility of uniting wounds of cartilage.—"Sept. 26, 1724, a soldier, fighting with one of his companions, had the *whole cartilaginous part of his nose bitten off*. His adversary perceiving that he had a bit of flesh in his mouth, spat it out, and in a fury trampled upon it. The soldier picked up the end of his nose, threw it into the shop of a Mr. Galin, and ran after his enemy. In the mean time, Mr. Galin examined the amputated part, and, as it was covered with mud, he washed it at the fountain. The soldier returned to have it dressed. Mr. Galin replaced and retained it in its position by plasters. On the fourth day I dressed it myself, *and saw that the parts were completely united.**"

Candour obliges us to confess that we also, like the herd of our unthinking neighbours, "slow of heart to believe," were disposed to join Mr. Bell in giving the lie to this narrative, until similar instances forced themselves on our notice, accompanied with such marks of truth that the most stubborn scepticism could not fail to admit. At one of the meetings of the Westminster Medical Society held last year, two cases were related of this kind. To one of them in particular we may refer, not only because the facts were notorious to many individuals of the profession who were eye-witnesses of it, but because we are enabled, through the kindness of Mr. Kirkup, the present house-surgeon of St. Bartholomew's Hospital, to record it in our pages with sufficient evidence of its truth.

"A butcher," says Mr. Kirkup, "whose name I never knew, and whose address I am so far ignorant of, that I can only say he *then* lived somewhere about Islington, told me he had chopped a portion of his fore finger off (the division was about the middle of the second phalanx). On inquiring more particularly into the circumstances of the case, he stated that it was done about a month before, at eleven o'clock in the morning; that he wrapped the detached portion in a piece of paper, and brought it to the hospital at four in the afternoon, when Mr. Titler, a dresser of Sir James Earle's, applied together the surfaces occasioned by the division, and kept them in apposition by slips of adhesive plaster, the effect of which mode of treatment was, that union took place, and he eventually recovered the use of the whole finger. On enquiring of Mr. Titler, his account exactly agreed with that which the butcher had given. How long it is since this occurrence took place, I do not remember, but, as near as I can recollect, it must have been about August or September 1812, but I am far from being sure of the time."

Let it be observed, this cure was not effected in private. Like those related by our author, it is attended by marks which would inevitably lead to a disproval should it not be true, a circumstance which our respect for the honour of the profession, and the credit of the narrator, will not allow us for one moment to doubt.

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* Traité des Operations de Chirurgie, tom. 3. Observation d'un *nez arraché*, jettée ensuite dans un ruisseau, & *qui a repris*.

Here then we have satisfactory proof of the adhesion of parts of an animal body *totally separated from each other;* and cases are fresh in the memory of most of us, many of which are recorded, of *all but total* separation where the re-union has been complete, nor has the probability of the event given rise to one doubt.

It becomes a question in those cases where a mere thread of skin has been the only remaining medium of connection, whether this is really sufficient to keep up that degree of circulation which has been assumed to be indispensable to reunion—whether this slender connection, which has been supposed capable of preserving the circulation, would be sufficient to keep up the vitality of the separated portion without its apposition and immediate adherence to the part from which it has been removed.

On turning to the 3d volume of the late Dr. Kirkland's Enquiry into the State of Medical Surgery, we find an account of one of these *all but total* separations, which we the more readily transcribe, because it produced an impression on the mind of that excellent and discriminating practitioner of the possibility of uniting parts *totally divided.* So little connection existed between the parts disunited in his case, that they seemed to warrant a belief in the truth of Garangeot's story, or at least of the possibility of the allegations contained in it.

"In the absence of my neighbour, Mr. Cantrell," says Dr. Kirkland, "my nephew Mr. T. Kirkland, and myself, went to Mr. Choice, of Normanton, whose ear was so nearly torn off by a threshing machine as to *hang down merely by skin.* While the parts were cleaning, an idea occurred to me of the possibility of its uniting; and, instead of stripping it off, I desired my nephew to pare off the ragged edges, and lay it again in its place. As it bled when the edges were made even, I had some distant hope that it might succeed. It was therefore surrounded by adhesive plaster and bandage, and left for some days. When Mr. Cantrell thought proper to remove the dressings, he found there was a disposition in some part of it to unite, and though the discharge continued many weeks, it united firmly, and the scar is scarcely observable, the external parts of the ear not having been injured."

Dr. Balfour gives two cases whose authenticity seems unquestionable; since, independent of the authority derived from his personal character, they are ushered into the world with all the weight that judicial deposition and oaths can give them: one occurred in his own family. As they are of too much importance to be trusted to the fleeting pages of a small tract, and may be curious and useful to our numerous readers, we make no apology for transcribing them.

"CASE I.—About eleven years ago, Mr. Gordon, surgeon, now, I believe, in India, after having conversed with me for some time one day, in my shop, upon going out, shut the door smartly after him, without perceiving any body near it. Unfortunately, one of my sons, a boy of about four years and a half, diverting himself

on

on the outside, had one of his hands in the groove of the hinge-side of the door. I was shocked with a wild scream that I heard upon the door being shut; and still more so, when Mr. Gordon came in, carrying the boy in his hands, stretched, from agony, as upon a rack. The points of three of his fingers were completely separated, with the exception of a slight attachment of skin, which barely suspended the parts. The points hung at right angles when the fingers were extended. The point of the index was cut off at the middle of the nail, the fore-finger a little above the nail, and the ring-finger at the root of the nail. The wounded surfaces were necessarily much bruised, but the fingers were, nevertheless, cut so perpendicularly, that, unless I had seen it, I could not have believed a door could have done it. With the assistance of Mr. Gordon, the innocent cause of the accident, I instantly replaced the parts, with but little hopes I confess, owing to the degree of contusion of the wounded surfaces, of reunion taking place. But I was so shocked at the idea of the boy's hand being mutilated for life, that I hesitated not a moment to put the powers of nature to the test. On the sixth day after the accident I removed the bandages, when I found adhesion had taken place, to the unspeakable joy of Mr. Gordon, the boy, and myself. The skin and nails came off all the three fingers, but were afterwards renewed; and the cure was so complete, that a narrow inspection was necessary to discover any difference between the fingers of the one hand and those of the other. There was, indeed, no difference to be perceived, but a slight scar on the left side of the ring-finger, at the root of the nail. This case I certainly would have published at the time it occurred, but on Mr. Gordon's account, who, though not the smallest blame was attributable to him, suffered more anxiety and distress of mind than I did myself, and never liked to hear the subject mentioned. I trust he will now excuse me for mentioning him by name, having no other motive for so doing, than the establishment, beyond the possibility of contradiction, of the truth and accuracy of the above statement. Mr. John Moffat, accountant of Excise, Mr. Alexander Milne, surgeon, now on board the Norge, 74, and my servants, were likewise witnesses of the facts. The boy died of the scarlet-fever, a year and a half after the accident; and but for the following case occurring, which to most, I am sensible, will appear much more interesting and decisive, that of my son would never have been recorded.

Case II.—On the 10th day of June last, two men came into my shop, about eleven o'clock in the forenoon, one of whom, George Pedie, a house-carpenter, had a handkerchief wrapped round his left hand, from which blood was dropping slowly. Upon uncovering the hand, I found one half of the index wanting. I asked him what had become of the amputated part. He told me he had never looked after it, but believed it would be found where the accident happened. I immediately dispatched Thomas Robertson, the man that accompanied the patient, to search for and bring the piece. During his absence I examined the wound, and found that it began

near the upper end of the second phalanx, on the thumb side, and terminated about the third phalanx on the opposite side. The amputated piece, as measured by the patient himself, was an inch and a half long on the thumb side, and an inch on the other. The wound was inflicted in the cleanest manner, by one stroke of a hatchet, and terminated in an acute point.

In about five minutes, as nearly as I can guess, Thomas Robertson returned with the piece of finger, which was white and cold; and I remarked to Dr. Reid, who was present, that it looked and felt like a bit of candle. Without the loss of a moment, I poured a stream of cold water on both wounded surfaces, to wash away the blood from the one, and any dirt that might be adhering from the other. I then applied, with as much accuracy as possible, the wounded surfaces to each other, expressing a confident expectation that reunion would take place.

I endeavoured to inspire the patient with the same hopes, by detailing to him the success I had in my son's case, which, for the reasons already mentioned, was to me quite decisive of the question, whether or not parts entirely separated from the system would reunite? All this was heard by the patient with a very apparent distrust. But I could do no more than tell him, that, if reunion did not take place, no harm could ensue from the attempt, and that, if it did, a great deformity would be prevented. I informed him, that unless pain or fetor, or both, should occur, I would not remove the bandages for a week at least; directed him to keep his fore arm slung, and not to think of any kind of work. At last he entered so far into my views as to promise punctual obedience. He called on me next day, when he felt no particular uneasiness, but remarked, that the wound had not altogether given over bleeding. Assuring him there was nothing in that, desired him to call on me every day; but did not see him again till the 4th of July! Concluding, from his absenting himself without assigning any reason, that he was one of those, too frequently to be met with in the lower ranks, who go from one medical man to another, just as their fancy strikes them, or as they happen to be advised by some of their foolish and ignorant neighbours, and whose ingratitude to any practitioner is in exact proportion to the good he does them, I suspected he had fallen into bad hands, and that I never would hear more of him. On the 2nd of July, however, a gentleman called on me, and asked if I recollected a man who had got a finger struck off, about three weeks before, to have come through my hands?

I told him I recollected perfectly well; that I was filled with indignation at the fellow's unreasonable and ungrateful conduct; and that I was just about setting on foot a search after him, not having informed myself either of his name or place where he was employed, at the time he applied to me. The gentleman said he would save me the trouble, for he could give me an account of the man.

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The accident happened on the 10th of June, and on the 12th the patient, under the influence of the ridicule of his acquaintances, for giving the least credit to my assurances that reunion would take place, applied to another practitioner. This gentleman, I am informed, on being told the object I had in view in replacing the piece of finger, represented the impropriety of any other person intermeddling with it. But, prepossessed with the belief that he carried about a piece of dead matter only tied to the stump of his finger, the man insisted on having the bandages removed, which was done accordingly. Thus were nearly rendered abortive, my attempts at the reunion of the parts, and the profession deprived of a fact, which, as demonstrating the wonderful powers of nature to repair injuries, inferior, in importance, to none in the annals of the Healing Art. But, fortunately, nature had been too busy for even this early interference to defeat her purpose—ADHESION HAD TAKEN PLACE.

In consequence of the information I got from the gentleman who called on me on the 2d of July, I found out the patient on the 4th, when reunion of the parts was complete. The finger, in fact, is the handsomest the man has, and has recovered both heat and sensation. In the progress of the cure, the skin was changed, and, soon after the accident, the nail fell off; but I have not the smallest doubt that it will likewise be renewed.

From the information obtained, not only from the patient himself, but from those present when the accident happened, I am satisfied that upwards of twenty minutes must have elapsed before the parts were replaced. For the patient did not apply to me *immediately* upon receiving the injury. He waited on the spot till a great number of his fellow workmen, separated in different apartments of a large building, came to see and condole with him on the occasion."

Our author, with great show of reason, denies that the circulation is kept up in parts cut out of the forehead, as now practised in India in the making of artificial noses; and he observes, that the *twist* given to the small attachment left at the root of the nose, must almost entirely preclude any thing of the kind; and expresses his conviction, that, had Talicotius at once separated from the system the flaps of skin with which he repaired mutilated parts, his operations would have been equally successful, infinitely less troublesome to himself, and less distressing to his patients.

At the close of this interesting little tract, Dr. B. enters into some speculations respecting the manner in which the reunion is effected; but we are so sick of theories, that we shall not offer one opinion to the notice of our readers. It is proper to add, that the doctor, as a security against the disbelief of his brethren, accompanies his cases with the affidavits of George Pedie, one of the patients, Thomas Robertson, and Dr. Reid, a physician in Edinburgh.

A View of the comparative Advantages and Disadvantages of the Navy and Army Surgeon, and of the Surgeon in Private Practice; together with a proposed Amendment of the Condition of Assistant-Surgeons, at their outset in the Navy. By WILLIAM CULLEN BROWN, M.D. Ed. Surgeon of his Majesty's Prison-Ship Arve Princen. 8vo.; pp. 80; 1814.

ALTHOUGH a portion of the interest which this production is well calculated to excite, is removed by the recent cessation of hostilities, the continuance of war with America, and the peculiar nature of that war, must still keep up a large naval force, and consequently render the subject interesting to all persons likely to enter the service in a medical capacity. In our opinion it could not have been offered to the public at a more suitable time. In the multifarious business which, during a long and obstinate war, continually occupies the serious attention of the Admiralty, the comforts and convenience of medical officers are not likely to be much attended to; their pay has been increased, and what more ought they to expect? The interval of peace is the season for improvement, and by perusing the interesting pamphlet before us, the Lords of the Admiralty may learn, from an experienced medical officer and an enlightened scholar, the nature of those grievances which, otherwise, it is probable they might never have known or heard of. The author is well qualified for the task he has imposed upon himself, and we observe with pleasure that he has not shrunk from drawing a bold outline of the evils which an assistant-surgeon in the navy endures, nor avoided painting in glowing colours the abuses in the system, which, if not remedied, ought to deter every man of education and principle from exposing himself to. If the acquisition of money is the sole object, indeed, for which young men enter the navy, then the author's statement will produce little effect; but we are of a different opinion, and therefore consider the present publication likely to occasion considerable sensation; it ought to induce young men of liberal education to pause before they subject themselves to a situation degrading and irksome; it ought to induce men in power to obviate the grievances of which it so justly complains.

The author very candidly inquires into the relative advantages of the young surgeon in private practice, in the army, and in the navy, and proves that the latter, in the course of a few years, supposing him to start with equal talents, education, and professional acquirements, becomes decidedly inferior to the two former classes of practitioners. If the facts on which Dr. Brown grounds this assertion be correct, and we have no reason to call them in question, with some happy exceptions, his general principle must be true; it is utterly impossible for young men in the situation of assistant-surgeons in the navy not to suffer from the circumstances in which they are placed.

We shall now present our readers with some extracts, from which they may appreciate the nature of the service which we think Dr. Brown may be instrumental in performing.

"Let

"Let it be taken for granted, then, that the student about to enter into the medical surface of the navy, *at twenty-three years of age* possesses every requisite qualification; that he has been previously well grounded in the classics, and other branches of a liberal education; that he has acquired, under the tuition of the ablest teachers, a reasonably adequate knowledge of the theory and practice of medicine and surgery; that his application to study, his conversation with professional and literary men, as well as with the polite and ingenious of both sexes, in short, that the whole tenor of his education, have formed his character and perfected the gentleman.

"In compliance with the advice of friends, or induced by the naval service, since the late improvement of its medical establishment, now holding forth the fairest prospect of acquiring wealth, or in consequence of the disposition to roam, so natural to youthful and aspiring minds, he determines on going to sea, obtains his warrant, and repairs on-board of his destined ship. How far such change of circumstances is adapted to his preserving unimpaired the knowledge supposed to have been acquired by so much industry, and treasured up at such expense, will appear in the sequel.

"Here all is a scene of novelty to him, calculated to excite his wonder. The manners, the mode of living, and the very language, which prevail on all sides, are matter of surprise to him. Every thing engages his attention and curiosity, and has the effect of banishing the remembrance of the past. This gentleman, so educated, and hitherto accustomed to associate with polite people in middling life, instead of being permitted to mess in the Ward-room, or Gun-room, among officers more suitable to himself in point of years, understanding, and circumstances, and having an established cabin assigned to him, doomed in future to the society of boys and mere striplings, is compelled to submit to the innumerable inconveniences and hardships of the midshipmen's birth, a complete description of which would be neither brief nor easy. The petulance of the younger, and frequently the waggery or rudeness of the older midshipmen, together with the noise of all, effectually combine to prevent him from application; and he can rarely, for an hour together, snatch an opportunity of perusing his book without molestation.

"Denied the privilege of a cabin, or place of refuge from his boisterous messmates, whose clamour and gaiety perpetually stun and distract him, and forced to remain in this degrading situation for two or three years—sometimes much longer,—before he can reasonably expect his promotion, independently of the manifold distresses to which the strange element which he now inhabits at first subjects him;—in such circumstances, what change, at the expiration of three years, is his mind likely to have undergone? Is he become better informed in medicine and surgery? Has he fallen back in his information? Or does he, in this particular, remain stationary? It were wonderful, indeed, if, during so considerable an interval, the original stock of his learning did not suffer material diminution, and if the minutiæ of anatomy, formerly in a great de-

gree familiar to him, as well as his correct knowledge of the symptoms of diseases, did not proportionably escape his memory. It will *now* be found that he can no longer read Horace and Virgil with his former readiness; his mathematics are contracted within the narrow limits of defining a few common axioms; historical facts are recalled by him with difficulty; the practical application of his chemistry is no more familiar to him; the outlines of his botany have faded away: in a word, his memory has become blunted with respect to every branch of human learning. In the mean time, he almost unavoidably has contracted much of the coarseness of manners to which he is hourly exposed; and there is likewise a danger, nor that an imaginary one, that the incessant irksomeness of a situation, from which he cannot extricate himself, and in which he is altogether deprived of any opportunity of resorting to such sources of amusement and refuge from *ennui*, as every well-stored mind must possess, will frequently make him desirous, as it were, of flying from himself, and banishing the habitual uneasiness, or rather wretchedness, of his feelings, by the fatal expedient of having recourse to the bottle. Thus he forgets his urbanity, loses his ambition, becomes indifferent about his profession, and, degenerating into a character little superior in refinement to the seamen around him, takes more interest in the manœuvring of the ship, than in the operations of surgery, or the farther improvement of his mind."

If this be regarded as strong language, let it be remembered that the voice which proclaims the necessity of a reform, must on all occasions be loud and bold: this is not a time for timid hints, and feeble remonstrances—Government have acknowledged the difficulty of supplying the navy with proper medical assistance, they have augmented the pay, and conferred titles of rank on the subordinate officers; but they have omitted to provide for the evils of which Dr. Brown so feelingly complains. We agree with him, that it is a monstrous and unnatural arrangement, that students whose future progress in life, whose fame, wealth, and honour, depend on the full and proper employment of their time, in perfecting what their education has only commenced, should be compelled constantly to associate with a number of wild, thoughtless, giddy, youths, "crowded together (as the author observes) with scarcely any other care than that of satisfying their craving, keeping their watch, and, at night, *turning-in* to their hammocks, enjoying the height of health, and in the hey-day of youth." "They will naturally (he continues) manifest their happiness in boisterous mirth, and in all manner of extravagancies, in practising a thousand tricks on each other, but more especially on the *doctor*, as he is called, whom they look upon as a kind of exotic animal obtruded upon them, of a genius and character altogether foreign to their own, and, consequently, consider in the light of what is familiarly called *fair game*. In particular, there is a general combination against his studying; and the loudest and most successful in obstructing his application, obtains the palm among his confederates."

Amongst such associates, it seems hardly possible for the best disposed

disposed and most studious mind to advance in the attainment of knowledge, and it must be extremely difficult for the generality of young men to escape the influence of idle and dissipated habits; so that when the young surgeon has at length obtained the rank for which he aspired, and is appointed full surgeon to a ship, he has lost the habit of studying, and is but ill prepared to fill the situation with honour, or to his own satisfaction.

The sketch which the author draws of the young army surgeon is much more agreeable, and a man must have a very strong bias for the sea, who, after reading it, can have the smallest hesitation in his choice of which service to enter. At the same time we must observe, that even in the land service there are many drawbacks from study, and numerous temptations to dissipation, which can hardly occur in private life. But, if opportunity offer, it is a pleasant, and may be made a most useful, employment of time, for a young man to dispose of two or three years in army practice, before he seriously settles, probably for life, in a narrow sphere of action. He may thus acquire more general knowledge, liberality, and freedom from prejudice.

The author's opinions of private practice are not very favourable. Unquestionably, to minds of a certain cast, nothing can be more irksome or intolerable than the few first years, till the blush of youth is entirely effaced; or, in provincial towns, the jealousies and enmity of *professional friends*, are subdued by steady superiority of conduct or cautious address. The subject is sufficiently hateful, and the author has not attempted to conceal its deformity. If we admired his courage in exposing abuses in the navy, we cannot censure him for lashing the bickering, the servility, and the prejudices, which too frequently disgrace individuals in private practice. We recommend his Treatise to the serious perusal of all young men about entering the medical profession, and parents would do well to read it before they doom their sons to a profession of certain toil and trouble, and doubtful honour and renown. The first lord of the admiralty too, to whom it is dedicated, will do well not to neglect the hints it contains, though we have considerable doubts of the author's being promoted to a higher station. It is not pleasant for an officer to publish to the world that his superiors neglect their duty. We are not now surprised to observe a physician of Dr. Brown's attainments and experience surgeon to a prison-ship, of which, except for his present treatise, we should never have heard.

An Enquiry into the Probability and Rationality of Mr. Hunter's Theory of Life; being the subject of the first two Anatomical Lectures delivered before the Royal College of Surgeons of London. By JOHN ABERNETHY, F.R.S. &c. Professor of Anatomy and Surgery to the College. 8vo. pp. 95. Longman and Co. 1814.

THE name of John Hunter seems to carry with it a kind of inspiration in the philosophy of surgery. At the sound of it, all exclaim *Jovis omnia plena.* Yet it is difficult to say whether he is

more praised or abused. Among his countrymen, he has rarely fair play allowed him. If we attend to the Bells, men of no mean consideration, we shall find nothing but obscurity, affectation, and error, in whatever is quoted from the subject of this panegeric. Not to mention Mr. Jesse Foot, it would be easy to produce many other writers who have been anxious to find errors in so conspicuous a character, and even his biographer Sir Everard Home has not been backward in relating many cases in which it was necessary for him (Sir Everard) to repair his master's errors.*

When we recollect all these circumstances, and compare them with the increasing celebrity of Mr. Hunter, we cannot but view in a still more exalted light the extraordinary merits of the man whose fame only increases as the science of medicine advances; yet, on a fair estimate of the question, may we not be allowed to ask, where shall we find an intelligible statement of his doctrines? Not in his writings, for, after the utmost diligence, (and the nature of our occupation imposes much industry upon us,) we confess that we have never risen from a perusal of his most laborious works with either satisfaction or improvement. The heaviness of style, the tedious detail of experiments, and the obscurity of terms, require attention to such a variety of points at the same time, as always fatigues us before we can gain sufficient information. We are not ignorant how much we owe to Dr. Adams for rendering Mr. Hunter's only practical work intelligible to us, but still, in the introductory commentaries to the Treatise on the Venereal Disease, the grand theories are no further explained than the subject required; and we have never met with any thing in the various encomiums bestowed by that able writer on a master whom he seems to idolize, which could seem even to hint at Mr. HUNTER'S THEORY OF LIFE.

On this account we seized with eagerness the opportunity of examining the work before us: for though we were aware there is on some occasions a want of perspicuity in Mr. Abernethy's writings, yet we could not doubt that we should meet with a satisfactory explanation of the only subject proposed in the title-page.

Mr. Abernethy's character stands too high to require any apology from us. Besides which, from the nature of our publication, if we have misconceived or misrepresented him, it is always in his power, or in the power of his friends, to rectify our errors; and nothing, we are sure, will give our readers more pleasure, than to find such a subject elucidated even at the expense of exposing our dullness. We shall therefore go through the pages as they occur, marking only the impression they leave on our minds, and waiting to find that impression confirmed or removed.

The exordium contains a compliment to Sir William Blizard, who, it appears, was Mr. Abernethy's earliest instructor in these sciences, and whose moral precepts were not less valuable than his anatomical lessons. After this we have some remarks on the importance of truth, and the value of the healing art: in these, much

* See Treatise on Stricture *passim*.

novelty

novelty cannot be expected. Sir Everard Home next receives a complimentary apostrophe, as one who pursues the path of science pointed out by Mr. Hunter. Mr. A. expresses his wish to do the same, and also to engage the attention of his hearers on the *probability and rationality of Mr. Hunter's Theory of Life.* A definition of theory and hypothesis follows, and we are told that the facts collected by Mr. Hunter seem sufficient to establish his *opinions* respecting life, on which account they are considered to deserve the name of *theory.* A number of remarks follow on the subject of theory, as distinct from hypothesis and opinion; and, after the second introduction of Sir Isaac Newton's name, we are told, "Our theories, hypotheses, or opinions, for to me all these words seem to refer to one act of the mind," &c.—Hypothesis and opinion we are ready to admit to be nearly the same, but there is a difference, which the etymology readily points out: supposition is the literal Latin translation of the Greek word *hypothesis;* but the etymology, as well as the received meaning, of theory, differs from hypothesis and opinion. The terms, like most others expressive of intellectual objects, are borrowed from such as are applied to the external senses, that is, we express by the word *theory* what is so satisfactory to the understanding, that we *see* it with the mind's eye; and such, we conceive, must be Mr. Abernethy's meaning, when he afterwards says, that an hypothesis may be converted into a theory, that is, we conceive, that, when proved, what was at first only *supposed* is *seen* and universally admitted.

If, in tracing the next division of the harangue, we should not perfectly understand Mr. Abernethy, we shall at least be careful not to misrepresent him. We are first told, "that it is by means of the organization of the body the mind acquires all its information;" and in the next paragraph, "When we find that every organ and every portion of it is composed of a few *and simple fibres;* that by these it *is originally formed,* kept in constant repair, and endowed with *animation,* sensation, and motion." Here, we must first remark, we are "lost in astonishment," as the author expects us to be; but a part of that astonishment is what the orator can mean, and next, in what part of Mr. Hunter's writings such opinions can be found. We should indeed have conceived that the illustrious dead had been entirely forgotten, and that Mr. A. was now proceeding with his own opinions, were it not that the paragraph, which finishes with a pause, closes with the following sentence: "I shall begin with the fibres, the only visible means by which motion and sensation are *produced;* for this will lead directly to the *consideration of Mr. Hunter's theory of life.*

The oration is resumed with the following paragraph, which we transcribe, because it contains more about Mr. Hunter than any *other passage.*

"In surveying the great chain of living beings, we find life connected with a vast variety of organization, yet exercising the same functions in each; a circumstance from which we may, I think, naturally conclude, that life does not depend on organization. Mr. Hunter,

Hunter, who so patiently and accurately examined the different links of this great chain, which seems to connect even man with the common matter of the universe, was of this opinion. In speaking of the properties of life, he says, it is something that prevents the chemical decomposition, to which dead animal and vegetable matter is so prone: that regulates the temperature of the bodies it inhabits, and is the cause of the actions we observe in them. All these circumstances, though deduced from an extensive contemplation of the subject, may, however, be legitimately drawn from observations made on the egg. A living egg does not putrefy under circumstances that would rapidly cause that change in a dead one. The former resists a degree of cold that would freeze the latter; and, when subjected to the genial warmth of incubation, the matter of it begins to move or to be moved so as to build up the curious structure of the young animal."

After the former remarks, we leave our readers to determine the meaning of the commencement of this paragraph, and shall only observe, that we are ready to admit that life is not the effect of organization, yet we cannot say that it is entirely independent of it, when we know by experience that the disorganization of certain parts is sufficient to destroy life in the whole. The subsequent remarks only relate to Mr. Hunter's definition of life, but say nothing concerning his theory *of* life. However we are pleased with this part of the orations, as it proves the means of introducing a pithy little sentence, which, though not entirely new, we feel an irresistible inclination to transcribe.

"Many persons (says Mr. A.) have genius without industry; others industry without genius; and *many who have both are still deficient in judgment.*" Some remarks on genius and the other properties of the mind follow; after which we are again informed that the orator now proceeds "to consider the structure and functions of those fibres which constitute the muscles, in order to introduce the discussion of *the probability and rationality of Mr. Hunter's theory*, as a cause of irritability." A minute and very judicious description of muscular fibres follows, with some remarks on muscular motion. The constant action of the sphincters, and the contraction of muscles, from powerful stimuli after apparent death, which, after a short cessation, may be again excited, induce our author to conclude that "the foregoing facts appear to show the impropriety of the phrase exhausted irritability, *which is in common use.*" We should be glad to know with whom, excepting the few remaining followers of Brown and Darwin.

The subject of muscular contraction is continued without any novelty till we are brought to "review the conjectures that have been formed as to the cause of these curious, sudden, and powerful contractions," by which we suppose are meant muscular contraction in general. Without attending to exploded hypotheses, only the more modern ones are introduced.

The first of these is, that "the contraction is the effect of chemical change occurring in the part." This we conceive connected

with Mr. Home's opinion that secretion may be the effect of galvanism. However that may be, we shall not entertain so little respect for our readers as to conceive it necessary to combat such phantoms.

Secondly, we are told that contraction of irritability is supposed to be a *property* of the muscular fibre: of this, as it occurs again, we shall say more hereafter.

Thirdly, we are referred to Mr. Hunter's opinion, "that irritability is the effect of some subtile, mobile, invisible substance, superadded to the evident structure of muscles, or other forms of vegetable and animal matter, as magnetism is to iron, and as electricity is to various substances with which it may be connected. Mr. H. doubtless thought, and I believe most persons do think, that, in magnetic and electric motions, a subtile invisible substance, of a very quickly and powerfully mobile nature, puts in motion other bodies which are evident to the senses, and are of a nature more gross and inert. To be as convinced as I am of the probability of Mr. Hunter's theory as a cause of irritability, it is, I am aware, necessary to be as convinced as I am that electricity is what I have now supposed it to be, and that it pervades all nature. To obtain this conviction, it is necessary that the facts connected with this subject should be attentively considered; but for such an examination I have no time; neither would it be considered as suitable to the general design of these lectures."

Some remarks follow on the properties of matter, and afterwards of electricity. The phenomena of electricity and life, we are told, correspond. "Electricity may be attached to, or inhere in, a wire." And is life attached to, or does it inhere in, a wire? "So life (continues Mr. A.) inheres in vegetables and animals." What can this analogy mean: is life inhesion then?

"The motions of electricity are characterised by their celerity and force; so are the motions of irritability. The motions of electricity are vibratory; so likewise are those of irritability. When by long continued exertion the power of muscles is fatigued, or when it is feeble, their vibratory or tremulous motions are manifest to common observation, but the same kind of motion may be perceived at all times by attention, as has been shewn by Dr. Woolaston in the Croonian Lecture for the year 1810. It is then, I think, manifest that Mr. Hunter's conjectures are the most probable of any that have been offered as to the cause of irritability."

We confess ourselves greatly at a loss to understand this; and unfortunately the time allotted does not permit Mr. Abernethy to consider the other vital functions, a consideration which he relinquishes with reluctance, because he has been speaking only on that point in which it seems most difficult to persuade the incredulous of *the probability and rationality of Mr. Hunter's Theory.* If his time was short in the theatre, we cannot avoid expressing a wish he had allowed himself more before he went to press.

After another pause, a very eloquent paragraph follows, in which we are informed that "Mr. Hunter points out to us how matter

starting

starting from the general mass springs into life in vegetation." We confess we should have been much less surprised to have met with such a passage in Darwin or any other poet; though these gentlemen for the most part invoke the assistance of some Muse before they engage in so arduous an undertaking. We are next informed that the torpedo and gymnotus have *organs* forming an electric battery; but, as in the next page it is observed that Mr. Hunter always considered life as something independent of *organisation*, this does not yet lead us nearer to his theory. Nor can we find any advantage derived from the experiments of Sir Humphrey Davy; for, though that acute philosopher pointed out to us that electricity is sufficient to produce those chemical changes we perceive in inert matter, without the intervention of human aid, yet this does not in the least lead to Mr. Hume's suggestion that secretion should be the effect of a similar cause. We therefore earnestly hope that in a future edition Mr. Abernethy will revise the following short paragraph.

"When, therefore, we perceive in the universe at large a cause of rapid and powerful motions of masses of inert matter, may we not naturally conclude the inert molecules of vegetable and animal matter may be made to move in a similar manner by a *similar cause*."

The reader will with us perhaps suppose that by this is meant that the change from dead animal and vegetable matter to life is induced by electricity. We are, however, assured that "it is not meant to be affirmed that electricity is life, only that *Mr. Hunter's theory is verifiable* that there is a subtle substance of a quickly powerful and mobile nature pervading every thing appearing to be the life of the world, and therefore that it is probable that a similar substance pervades organized bodies, and produces similar effects." Sir H. Davy's experiments seem, we are told, to realize the speculations of philosophers concerning the *anima mundi*. Pythagoras and Virgil are made to speak a similar language, but Mr. Abernethy chuses rather to adopt the words of Lucretius:

> Inde hominum pecudumque genus, vitæque volucrum
> Et quæ marmoreo fert monstra sub æquore pontus.

Thus poetically ends the first Lecture. In the second, Mr. A. proceeds to speak of the structure and functions of the nervous fibres. Their divisions, ramifications, and plexuses, are hinted at in a cursory manner, only with a view to the consideration of Mr. Hunter's Theory of Life, which now seems seriously entered upon: we shall therefore quote the following paragraphs:

"First, then, it is generally believed that all sensation is in the brain, and that all volition proceeds from that organ. This proposition requiring to be impressed so as to produce conviction, for it is the foundation on which all our future reasoning is founded, I shall state the principal causes of this opinion. First, If the continuity of a nerve be intercepted at any point between that extremity which receives impressions from the objects of sense, and which therefore may be called the impressible or tangible extremity, and that

that which communicates with the brain, and is usually called its sensorial extremity, both feeling and volition by means of that nerve are suspended.

"2dly. If a certain degree of pressure be made upon the brain, both feeling and voluntary motion cease whilst it continues, and return when it is removed.

"3dly. As we have evidence that the perceptions and intellect of animals increase in proportion as the brain becomes larger and more complex, so we have reason to conclude that these faculties are connected with that part of the nervous system.

"4thly. The conviction which we generally though not constantly experience, that feeling exists in the part which receives impressions, is shewn to be deceptive by the following facts. If a nerve be irritated midway between the brain and its extremities, severe pain is supposed to be felt in those extremities; and if it supplies muscles, those muscles become convulsed. Thus, when a disease forms about the hip joint, or in the loins, many persons have applied poultices to their knees, from a conviction that as the pain was felt in the knee, it was the seat of the disorder. In like manner, persons who have had their limbs amputated, can scarcely believe that they are removed, because of the pain and other sensations they still seem to feel in them. In either of these cases, motions being excited in the middle of nerves, and transmitted to the brain, are attributed to a disordered state of those parts, from which such motions have heretofore originated."

In these paragraphs we meet with nothing particularly objectionable, but they are neither discoveries of Mr. Hunter, nor has he ever claimed them as such, nor, as far as we know, built any theory upon them. The theory of a nervous fluid might be Baron Haller's, and perhaps the Latin quotation from that author may express as much; but we confess that either the Latinity or philosophy is so obscure as to baffle all our attempts at understanding him. On this account, we could wish Mr. A. had given us an English translation of the passage. Most of all, however, we wish, as Mr. Hunter always wrote in our mother tongue, that Mr. A. had been as careful to produce his words as he has the words of many others. We are told "Mr. Hunter's opinion of a subtle and mobile substance inhering in the nervous chords, is not essentially different from that of Haller." Let us then know precisely what Haller's is, and let us be informed of the passage in which Mr. Hunter speaks of this subtle and mobile fluid. We do not recollect to have seen it in his works. If contained in a MS. copy of his lectures, this would have been sufficient authority with us, had the passage been stated at length, with the name of the copyist.

We are now informed (page 79) that the first lecture contained the arguments to show that *Mr. Hunter's theory of life is verifiable.* Already we have lamented that we have not learned what the theory is, consequently are little able to judge how far it is verifiable. Now we are told that his theory of irritability does not materially differ from the theory of the best pathologists. But what can be

meant by "irritability as a *vis insita* of the muscles independent of the *vis nervea*." Can we entirely detach a muscle from every filament of nerves; or, if we could, can we call that a vis insita which only remains as long as life continues? It is said that this opinion of vis insita has received additional corroboration from Mr. Brodie's experiments: we should be glad to know from which? The succeeding observations are neither new nor at all objectionable; after which follows a passage, the inferences from which seem entirely at variance from all we have ever heard of Mr. Hunter's opinions.

"Assuredly, motion does not necessarily imply sensation: it takes place where no one ever yet imagined there could be sensation. If I put on the table a bason containing a saturated solution of salt, and throw into it a single crystal, the act of crystallization would begin from the point touched, and rapidly and regularly pervade the liquor till it assumed a solid form. Yet I know I should incur your ridicule, if I suggested the idea that the stimulus of the salt had primarily excited the action, or that its extension was the effect of continuous sympathy. If also I threw a spark amongst gunpowder, what would you think were I to represent the explosion as a struggle resentful of injury, or the noise as the clamorous expression of pain?"

Only one answer can be made to all this. It would be ridiculous to impute the crystallization of salts to the same cause as produces the spreading of inflammation in an animal body, and not less so to impute the explosion of gunpowder to a sense of pain in its ingredients. But are not these events uniform and constant? Do not the application of the same external causes invariably produce the same effect in both? Is such the case with the causes of inflammation in an animal body? Do they not vary in different animals of the same species, and even in the same animal at different times? Does not inflammation cease, and do not the parts restore themselves after the mischief thus produced; and are they not again liable to similar effects? Is such the case with gunpowder, or in the crystallization of salts, till we renew an artificial process; and is there any thing in animal life which we can uniformly and artificially restore.

At length Mr. A. regrets that the compass of a lecture is too short to establish *the rationality of Mr. Hunter's Theory of Life.* He however proceeds to remark, that "if it be not electricity, at least we have reason to believe it of a nature similar, and has the power of regulating electrical operations." This analogy the author conceives proved by the power which electricity possesses of altering the temperature of body from the freezing of water to the fusion of platina. Lastly, he observes, that "the varying and strong retention of life by seeds, and some kinds of vegetables and animals, are facts which seem more satisfactorily solved by *Mr. Hunter's Theory of Life,* than by any other."

Such is the general outline of two Lectures delivered before a Royal College of Surgeons in the first metropolis in the world. Such is given by a teacher of anatomy at the first Royal Hospital in the

the same metropolis, as a description or rather defence of the physiological opinions of a name not less the glory of British medicine, than Newton is of philosophy in general. No one is more ready to render due honour to so illustrious a name than ourselves: it must therefore be painful to us if we cannot comprehend what we wish to praise. . . . . .

MEDICAL AND PHILOSOPHICAL INTELLIGENCE.

AT a meeting of the *Westminster Medical Society*, held on Saturday, Oct. 22, Mr. HOWSHIP in the Chair, Mr. EARLE called the attention of the Society to the consideration of a disease affecting the extremity of the meatus urinarius of the female, consisting in a tumour of a florid red colour, composed apparently of a congeries of minute blood-vessels, somewhat resembling nævi materni, arising sometimes from a part, at others from the whole circumference of the passage. This complaint, he observed, was exquisitely painful on the least possible touch. He has seen five cases, in all of which caustic applications had been repeatedly and extensively employed, but without producing any permanent benefit, the granulations which threw off the sloughs taking on the same morbid sensibility. This led him to employ the scalpel in preference, from the expectation that the wound inflicted would heal without granulating. With this view, in a case which had existed for upwards of twenty years, he removed the whole circumference of the extremity of the meatus, and dissected out a considerable portion of the membrane, leaving the urethra. Some hæmorrhage ensued, which subsided with cold washes. The result fully answered his expectations; the wound healed, and no return of the complaint had since taken place. In this case the whole of the meatus urinarius was thickened and morbidly sensible, and the neck of the bladder painful and irritable. These symptoms are all much relieved, but not perfectly removed.

The same operation was afterwards performed in a similar case, of seven years standing, with equal success. In the second case, the disease was confined to the extremity, and consequently the relief obtained was more complete. He has a third case now under his care, which he intends to treat in the same manner. This last was formerly treated by caustic potass, with apparent, but only temporary, benefit.

Mr. WANT communicated two cases somewhat similar to the foregoing. In his patients the diseased alteration of structure was situated in the nymphæ and integuments of the clitoris, and consisted in an exquisitely painful thickening, accompanied with great discharge of mucus from the vagina. The colour of the parts was not, as in Mr. Earle's cases, florid, but had a livid erysipelatous hue. The treatment adopted was that of local depletion by leeches, which seemed to afford temporary relief, but was not sufficiently persevered

in to ensure success, had it been attainable. One of the subjects of this disease, a patient of the Northern Dispensary, was discharged for irregularity while under cure; the other, on a proposal being made to remove the diseased parts by the scalpel, as the most speedy and certain remedy, withdrew herself, so that the result of neither case is known.

Mr. NEVILLE related a case of affection of the stomach consequent to the use of arsenic, and supposed to be occasioned by it.

A young woman, æt. 26, before marriage, rather irregular in her habits, was attended for some suspicious sores on the tibia, considered to be pseudo syphilis, which resisted a variety of applications. Mercury was administered in alterative quantity without benefit. Arsenic and Sarsaparilla were then combined, and exhibited with great advantage. After three weeks, symptoms of considerable debility suddenly supervened, followed by violent pain in the head and stomach, with vomiting, and sensation of burning in the epigastric region. Bleeding, with local blistering, subdued the symptoms. In three days they recurred, and were again controuled by the same remedies: they recurred once again, and were similarly remedied, notwithstanding the greatly debilitated condition of the woman. Since her recovery from the affection of the stomach, the symptoms for which arsenic was administered are rapidly getting well.

Dr. CALCAGNO has published the result of his further experience on the internal use of Charcoal, in a letter "Sull' uso interno del Carbon di Legno," &c. wherein he relates his having cured a double tertian in the person of Giuseppe Bellavia, a patient in his hospital, by administering the powder of charcoal in the dose of a drachm every hour during the intermissions, but without the addition of an acid, which he formerly thought necessary. The fever did not return after two ounces of the powder had been administered.

From the 23d September to the 13th October, he had an opportunity of employing it in five other cases, in four of which the remedy succeeded by the time two ounces and a half had been given; but in the fifth, the fever not being removed after the exhibition of three ounces, he judged it prudent to have recourse to bark, which prevented the following paroxysm, although but half an ounce of the latter had been prescribed. The period of this paroxysm being over, he again ordered the charcoal, and the patient continued well.

Maccadino, his pupil, on returning to Calatafimi, his native place, in the month of August, succeeded in curing eight cases of intermittent fever with the same remedy; and Signior Francesco Buscarelli, surgeon, following his example, found it useful in four other cases of the like nature.

"In the district of Alimínusa, (says Dr. Calcagno,) I know that the Journal in which the discovery of the effects of charcoal was first announced had scarcely arrived, when the practice became general, the inhabitants adopting it (the charcoal) as well without the prescription of the physician as with it; and these write to me in a letter, bearing date the 23d December, 'That the patients labouring

ing under intermittent fevers that have been cured at this place by means of the powder of charcoal amount to a hundred and five; that each has not taken more than two ounces of the charcoal; and that the charcoal made use of was that prepared from the *stinco.*" Dr. Nicosia also employed it in seventeen other cases in the district of Nissoria, according to the testimony of Dr. Bursa of Palermo.

But, however assiduous the Sicilians may have been in taking advantage of a remedy they very much required, they have not been without rivals in many of the British practitioners, under the auspices and control of Dr. Borland, inspector of army hospitals. Mr. Mackesy, surgeon of the 62d regiment, has permitted to be published in Italian seven interesting cases, in which the charcoal was successfully employed by him; but, as these cases will probably be published in England, I shall not enter into particulars respecting them. Mr. Tully, surgeon, 35th regiment, in a report made to the inspector of hospitals, dated Zante, November 12, 1813, states, that he has found the remedy particularly successful in remittent and intermittent fevers of that island; and that its administration, in more than thirty cases, principally intermittents, has been attended with the most happy effects. "In obstinate cases of diarrhœa, and in the last stages of dysentery," he adds, "I have seen that the charcoal, in doses from 15 to 20 grains given three or four times a-day, is a most excellent remedy."

It has generally been supposed that vomiting is produced by the action of the muscular fibres of the stomach. Bell, Chirac, and Duverney, maintained the contrary; but the arguments adduced were insufficient to establish their opinions. A German physiologist, Wepfer, in some experiments made for the purpose of ascertaining the fact, having introduced poison into the stomach of an animal, excited spasmodic action, which he mistook for the contraction of vomiting. No doubt existed on the subject, until M. Magendie made his experiments on dogs, in which vomiting was excited by emetic tartar injected into the veins.

It is important to remark in these experiments, that, when the emetic is employed in this manner, vomiting is excited in a few minutes; whereas, when introduced into the stomach, the effect is often not produced in an hour. When nausea had taken place, the finger was introduced into a wound of the abdomen, and was strongly compressed by the diaphragm and abdominal muscles, but no movement was felt in the stomach. A portion of this viscus being withdrawn from the wound, the vomiting was excited without any contraction observed in it. When the stomach was drawn from the abdomen, nausea and efforts to vomit continued, but vomiting was not effected.

If the stomach thus situated is compressed, its contents are certainly evacuated, but purely by *mechanical pressure.* M. Magendie detached the whole of the anterior position of the abdominal muscles in a dog. The effort to vomit continued, but without effect; and the peritoneum was ruptured by it in several places.

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These experiments appeared decisive; but M. Magendie made another still more conclusive and extraordinary. He removed the stomach of a large dog, taking at the same time the necessary precautions to avoid hæmorrhage, and substituted in its place a pig's bladder, which was fastened to the œsophagus by means of a canula. The external wound being sewed up, vomiting was produced, as well as if the stomach had been in its place. It is evident from these experiments, that the stomach is quite passive during vomiting, and that it is not by an action upon the stomach only that emetic medicines produce their effects.—This is a transcript from the Gazette de Santé, which we present to our readers not from its actual novelty, but because, like many other undoubted facts, it has slept, as far as regards the mass of the professional public, for nearly one hundred years. M. Magendie will excuse us for denying the assertion, that the arguments of Chirac and Duverney were insufficient to establish the facts; they seemed to us to be conclusive; but, at the time the experiments were shewn to the French Academy, that learned body being engaged in other speculations, the subject was laid aside, to be confirmed by a repetition or extension of the experiments at their leisure.

The Italian surgeons seem to be entirely ignorant of the property which the ligature on an artery possesses of rupturing its inner coat. In this country it has been undeniably demonstrated, that the permanent obliteration of these vessels can only be affected by the adhesion of the surfaces thus divided. Hence, it was stated by Dr. JONES, that the application of a ligature, with a degree of sufficient force to produce the division of the internal coat, would obliterate its cavity, even if it were immediately withdrawn. An Italian professor, ASSELINI, who is now in this country, attended at St. George's, for the purpose of witnessing an experiment upon the fæmoral artery of a dead subject. The ligature was applied by Mr. BRODIE, and a portion of the artery removed, when, to the astonishment of the foreigner, the inner coat was most clearly divided. The establishment of this fact is of the greatest importance to surgical science, especially as it regards the operation for aneurism. Until lately, it was the practice of the operator (fearing the division of the coats) to include a small portion of some extraneous body between the ligature and the artery; thus in effect preventing that which is of the utmost consequence to the success of the operation, and without which secondary hæmorrhagy so frequently occurs.

M. CARRON, physician at Annecy, has published observations on the use of opium in the dry gangrene, which frequently attacks the toes. POTT was the first who made known the efficacy of opium in the dry gangrene of the lower extremities; his experience led him to believe that it arose from a high state of irritability in the feet, and that opium was the most proper to allay it. M. CARRON related three cases, which seemingly confirmed this doctrine. The first was a man, 65 years of age, who had been threatened with

with an attack of hemiplegia; dry gangrene supervened, and opium given in the dose of two grains abated the pains, but induced drowsiness. Spread, however, on a poultice, it produced no bad effect on the constitution, but quickly stopped the gangrene. In the second case, the gangrene had made dreadful progress, and was accompanied with violent pains: but, as the subject was a man 84 years of age, and attacked at the same time with typhus gravior, opium did not so immediately relieve the pains. Every application in this case failed. There was delirium, insensibility, constipation, dry black furred tongue, the toes entirely sphacelated, the leg and thigh covered with phlyctenæ, which destroyed the patient. The third was a man 60 years of age, who for some months had indications of gangrene, which made slow progress, but was very painful. Two months afterwards, he ventured upon taking opium internally, which immediately relieved the pain, and stopped the gangrene; the sphacelated parts separated, and the wound cicatrized; but the circulation is extremely languid, and the patient continues to feel a sensation of coldness in the feet.

Mr. KERRISON has published a case of hydrophobia, which, like most of its predecessors, terminated fatally.

The day after the accident caustic was applied to the part bitten. Five weeks after (July 7), upon the first appearance of indisposition, a cathartic medicine was prescribed; at this time no abhorrence of liquids was present.

Friday, July 8th, 10 A.M.—The boy had not drank all the draught, and was sick last night after taking it; the mother believes he vomitted all he had taken. One stool however had been procured in the night. He had shewn great difficulty in drinking his tea at breakfast. There was dulness of the eyes, and languor of the countenance, with a furred tongue and hurried pulse.

I now suspected the boy was under the influence of hydrophobia; but as it was considered necessary to prove its existence, before any intimation of the suspicion was conveyed to the mother, or any language used which could alarm the boy: a goblet of spring water was brought, and he was requested to drink. He took hold of the goblet, and attempted to drink; but, as soon as the glass approached his lips, a convulsive motion of the muscles of the fauces and throat prevented him from swallowing a drop of the liquid: he renewed his efforts, but without success. He was nevertheless requested to make a third attempt, and now got down about a table spoonful.

After having heard the preceding account, a goblet was procured; and whilst the water was gushing from a reservoir in the room into the glass, two distinct convulsions of the muscles of deglutition were remarked, corresponding in time with two strokes of the pump-handle by which the water was raised. When the boy attempted to drink he shuddered, and threw back his head several times; and the vessel was then taken from him, without his having tasted its contents. He was perfectly free from delirium, and seemed to be of a

placid disposition, having done, without reluctance, every thing that he was ordered to do. He walked home with his mother.

Fourteen ounces of blood were directly drawn from the arm; and an enema, containing one hundred drops of Tinct. Opii in four ounces of water, was administered immediately afterwards. A powder, consisting of one grain of Argenti Nitras and three grains of musk, mixed with six of sugar, was ordered to be repeated every six hours; a dram of Ung. Hydr. fort. to be rubbed in on the abdomen, and repeated every three hours; and a lotion, made of Sp. Æth. Comp. f ʒ i. Acid. Acet. f ʒ iii. and Aq. Distillat. ℥i., to be applied to the anterior part of the throat by a piece of folded linen, and kept constantly wet.

Five P.M.—The clyster is still within the rectum. The boy has been dozing at intervals, and he is now asleep. There is a constant and equal convulsive action of the muscles under the chin and about the *pomum adami*. On feeling his hand, he awaked with surprise; but, in a moment, was quite collected. The pulse is 108, and moderately strong. The mother says he has taken some sago since one o'clock, and drank milk and water. On presenting a wine-glass of water, at this time, he drank a little of it with less difficulty than at eleven o'clock.

Half-past six P.M.—An increase of pulse and an aggravation of the spasmodic symptoms being perceived, ten ounces of blood were taken, and another enema, containing 180 drops of Tinct. Opii in two ounces of water, injected. The powders, ointment, and lotion, had been continued as directed. A noisy breathing, whilst he was dozing, was now perceptible, and the tongue was involuntarily, but not violently, acted on by the convulsive efforts of the muscles connected with its posterior part. This became visible during his slumbers, when the mouth was partly open; for the tongue was observed to be propelled and retracted in exact time with the motions perceived on the anterior part of the throat.

Ten P.M.—There has been much dozing since my last visit, with sudden starts; and there is now a confused state of perception when awake. The pulse is 110, but considerably weaker. It feels more like a sinking pulse in typhus, than the vibratory stroke of the artery in fever from local inflammation. Same medicines continued.

Saturday 9th, half-past 8 A.M.—My patient passed a restless night. The debility is much increased; the convulsive twitches are stronger; he lies almost constantly in a muttering slumber, and, when awake, is in a state of delirium. Some sago had been taken in the night. A cathartic powder, with calomel, was directed to be given.

Ten A.M.—The powder had produced a copious motion within an hour; there was now an unmeaning stare and wild motion of the eyes, alternately dropping into slumbers and starting, as if the child was under the influence of fear. Fifty drops of Tinct. Opii were given at this time, and forty more an hour afterwards.

Twelve at Noon.—There was no change of the symptoms, except that a secretion of frothy saliva was apparent, which seemed to give trouble,

trouble as the boy put his fingers to his lips, and endeavoured to pull it from the mouth. The gums were inspected, but no indication of mercurial influence could be perceived. A large blister was ordered to be applied to the head.

Two P.M.—There are now violent contortions of the body and limbs, with perfect delirium, and the saliva is evidently inconvenient. He has not been able to swallow any thing since he took the sago, except the medicines.

Half-past three P.M.—The convulsions are very strong: the frothy saliva abundant; and the pulse irregular and sinking. Let twenty drops of Tinct. Opii be taken every half hour. One dose was immediately given with much difficulty. It was obvious that the disease was verging to its termination. A spasm very soon came on, which interrupted respiration for a short time, with a temporary cessation of the pulsation at the wrist. Respiration, however, returned, and the motion of the carotid arteries was visible; but, in about a quarter of an hour afterwards, a renewal of the spasm proved fatal.

The muscular contraction of the throat seemed at first to be lessened by the means employed, but it was soon found to be productive of great debility, without a corresponding decrease in the symptoms.

Mr. K. suggests the use of belladona, which it is generally known was recommended by Munnick as a *specific* for this complaint.—*Repos.*

Mr. KERRISON has given a case of Tic Douloureux, which seemed to be relieved by belladonna after the complete division of the nerve had been tried without effect. We hope it may be found equally successful in the hands of others.

One grain of the extract of belladonna was given in a pill, which was found to occasion vertigo, and great lassitude, with a peculiar and distressing dryness of the tongue and fauces; but the pain was removed. It returned the next day, and was again kept in check by smaller doses of the same medicine. A quarter of a grain of the extract was given three times a day, and increased to a third of a grain; then, a quarter of a grain morning and noon, and half a grain at night, sometimes omitting the medicines altogether for a day. The pain, whenever it returned, was as certainly removed by the medicine. In the course of three weeks, the disposition to the renewal of the *Tic* gradually subsided, and the remedy was consequently discontinued. No derangement of arterial action was perceived during this guarded use of the belladonna, nor were the bowels constipated. An augmentation of the dose was now and then attempted; but confused perception in a slight degree, and dryness of the mouth, always succeeded, although these effects subsided spontaneously in a few hours. The individual, with a mind of the highest order, and long habit of appreciating the effects of various medicines, was convinced of the power of this remedy over his complaint. Large doses of tincture of opium, and opium in sub-

stance, had previously been tried, without any good being obtained from them in this attack; and hemlock on a former occasion had also failed. The officinal solution of arsenic at that time, pushed to its full extent, had in some measure relieved, but not cured, the disease; but it had been discontinued from its deleterious influence on the general system.—*Repos.*

M. BECLARD, director of the anatomical works of the faculty of medicine in Paris, has published the case of a fœtus, the anterior lobes of whose brain passed out at the frontal suture, forming a tumour as large as the head. At the inferior nasal part of the frontal suture, were found two small extra bones, which were united to the palatine processes of the superior maxillary bones.

The same gentleman has also published a case of fœtus, the base of whose umbilical cord spread into a considerable sac, which enveloped the greatest part of the abdominal viscera and the thoracic viscera, the face, and part of the head. The heart, which was inverted, passed into the abdomen through an opening into the diaphragm, the apex adhering to the palate. This fœtus had also a voluminous hydro-encephalical hernia, and the feet were turned upside down.

Dr. JOHN has analysed some vegetable and animal substances, which are published in a book written by the author. The first section of this work contains the analysis of the juice of the euphorbia cyparissias. It is composed of

Water	77
Tartaric acid	Trace
Resin	13·8
Gum	2·75
Extractive	2·75
Albumen	1·37
Caoutchouc	2·75
Oil	Trace
	100·42

The earthy parts of the euphorbia are composed of the carbonate, sulphate, and phosphate of lime.

The analysis of the asclepias syriaca furnished

Resin	26·50
An elastic substance	12·50
Vegetable gluten	4·00
Tartaric acid and albumen	53·00
	96

The plant, when incinerated, furnished carbonate of potash, phosphate of lime, phosphate of magnesia, silica, iron, and oxide of manganese.

The author next analysed an elastic scarlet-coloured substance which comes from the east through Turkey, and which is known by the name of caoutchouc of Thibet. This brilliant and globular matter serves for bracelets, ear-drops, rosaries, &c. to the Russian

ladies: and the substance which was usually considered as caoutchouc is only an indurated and oxidated red oil. Its colouring matter is analogous to that of stick lac.*

The fruit of the rus typhinum contains gallic acid at the first moment of its developement; but, as it advances to maturity, bitartrate of lime is formed; and, as soon as the circulation of the sap in it has ceased, acetic acid is formed. This leads to the suspicion that the acetic acid has been formed at the expense of the tartaric.

Galipot, according to our author, is composed of a volatile oil and a resin. According to other authors, galipot is nothing else than a very impure specimen of the resin called *elemi*.

Analysis of Rocou.—The rocou of commerce is a substance already altered by fermentation. The author procured grains of it, from which he obtained the following result:—Rocou contains an aroma, an acid, resin combined with the colouring matter, vegetable mucilage, fibrin, coloured extractive, and a peculiar matter which approaches to mucilage and extractive. This analysis explains the reason why an alkali is added to rocou when it is employed in dyeing. The alkali combines with the resin, and forms a soap which dissolves in water. The alkali acts likewise on the colouring matter, and renders it more lively.

The second section of Dr. John's work contains observations on diabetic urine. Though neither urea nor gelatine are to be found in diabetic urine, it notwithstanding contains azote. Diabetic urine is composed of sugar, animal gum, urate of potash, sulphate of potash, muriate of soda and ammonia, phosphate of magnesia, and phosphate of iron.

Some experiments on the excrements of butterflies lead the author to suspect that they contain uric acid.—*Ann. of Phil.*

M. HILDEBRANDT has recently made some curious experiments on the preservation of the flesh of animals in the gases. In a receiver of the capacity of three cubic inches, filled with very pure sulphurous acid gas, he introduced through mercury a piece of fresh beef: in a few minutes the meat had absorbed almost the whole gas, and the mercury filled the capacity of the receiver, except some air-bells, which were probably owing to the atmospheric air. The meat soon lost its natural red colour, and assumed that of boiled meat: it did not undergo any other apparent alterations, and the air in the bell-glass preserved its volume. At the end of seventy-six days, during which time the temperature had varied from 0 to 10° Reaumur, the meat had scarcely acquired any smell of sulphurous acid: it was harder and drier than roasted meat. After leaving it four days in the open air, it then became more compact without being putrefied, and did not perfectly change colour: it merely lost the weak smell of acid without acquiring any other.

A piece of ox beef was treated in the same way in the fluoric acid

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* Bucholz has published an analysis of it in the first volume of Schweigger's Journal. He found it a concrete fixed oil of a red colour; but could not succeed in extracting from it a peculiar colouring matter, as announced by John.

gas,

gas, and the results were in every respect similar: the phenomena were only less visible, because the acid attacked the glass, and a thin coating of mercury was deposited on the meat.

Beef, deposited in a receiver filled with ammoniacal gas, exhibited alterations completely different: the absorption of the elastic fluid had taken place in it totally; the meat assumed a fine red colour nearly as in the nitrous gas, and preserved this fresh appearance for seventy-six days: it was much softer than in the foregoing experiment, without smell, and having the colour and consistence of fresh meat. When exposed four days to the open air it did not putrefy; it lost its red colour however, became brown, dried up, and was covered with a kind of varnish.

On the formation of Pyrophorus, by John Gorham, M. D.—In the first number of the Annals of Philosophy, Dr. Thompson, the editor, has inserted an extract from a letter of Professor Coxe of Philadelphia, in which it is mentioned, that a few drops of a solution of potass, added to the usual materials of pyrophorus, will greatly increase its susceptibility to spontaneous inflammation, on exposure to the air.

This fact respecting the addition of potass, I ascertained about eighteen months ago. Having made attempts to decompose the alkali by iron turnings, and having failed, as I supposed, from the want of a sufficiently intense heat, it occured to me that, as pyrophorus probably contains potassium, that metal might be obtained at a comparatively low temperature, by mixing with the iron and potass a quantity of the materials of which that combustible compound is formed. Accordingly about an ounce of the dried powder of alum and sugar, after they had been exposed to heat, was added to one ounce of clean iron filings, and half an ounce of dry caustic potass; this mixture was put into a gun barrel, arranged in the usual way for procuring potassium, and exposed for some time to a temperature approaching to a white heat. The experiment did not succeed, but the result was a very fine pyrophorus. Since that time, in preparing this substance, I have always added to the usual materials a quantity of potass, either caustic or in the form of sub-carbonate, generally in the proportion of about half a drachm of the latter, to one ounce or one ounce and a half of the former. With this addition much caution in the preparation is not necessary, for it has frequently been made in a pistol barrel and at different temperatures varying from a low red heat to a degree little short of a white. I have never been disappointed in pyrophorus formed in this manner, provided it be transferred as soon as practicable, to a small phial and be excluded from the air. Having had occasion lately to exhibit this compound, a quantity was used which had been prepared six months, and its spontaneous combustion when exposed to the air was equally as vivid as at the time of its formation.—*New Eng. Jour.*

Mr. STEVENSON will begin his annual Course of Lectures on the Anatomy, Physiology, and Pathology, of the Eye and Ear, early in January, at his house, in Great Russel-street, Bloomsbury.

Monthly

Monthly Prices of SUBSTANCES *used in* PHARMACY,

At Messrs. SELWAY and HENLEY's (Chemical and Pharmaceutical Laboratory,) 35, Upper Mary-le-bone Street, Portland Place.

Acetum Scillæ ..... lb.	2s.	0d.
Abietis Resina	2	3
Acaciæ Gummi, from 2s. 3d to	3	6
ACIDUM Aceticum, cong. 3s. 6d.—Benzoic. oz. 6s. 0d.—Oxalic. lb. 18s. 0d. —Nitric. 4s. 6d.—Nitros. 2s. 6d.—Muriatic. 0s. 9d.—Sulphuric. 0s. 6d. —Sulph. Arom. 5s 0d.		
Alcohol sp. gr. 815 M. lb.	4	6
Æther sulphur. sp. gr. 789	9	0
——— rectificatus sp. gr. 744	11	0
Ærugo ..... lb.	6	6
Aloes spicatæ extractum	5	6
—— vulgaris extractum	4	6
—— Barbadoes	5	0
Alumen, 4d. exsiccatum	0	8
Ammoniæ Murias, 2s. 2d. to	2	9
——— Carbonas	3	6
Amygdalæ Amaræ, 2s. Dulc.	5	8
Ammoniacum, from 3s. 6d. to	7	6
Antimonii Sulphuretum	1	0
——— Aurum. Sulph. ..	6	0
——— Murias	3	0
Antimonium Tartarizatum ..	5	0
Anthemidis Flores, 1s. 9d. to	2	0
Aqua Cinnamomi vera	18	0
—— Rosæ	5	6
Aliæ Aquæ, from 2s. 6d. to	3	6
Arsenici Oxydum ..... lb.	1	0
Argenti Nitras	6	9
Assafœtida Gummi-resina ..	6	9
Aurantii Cortex	2	6
Balsamum Peruvianum	33	0
——— Tolutanum	15	0
Benzoinum elect.	11	0
Calamina præp.	0	3
Calumbæ Radix	2	6
Cambogia opt.	9	6
Camphora	7	0
Canellæ Cortex	3	4
Cardamomi Semina ppt.	12	0
Cascarillæ Cortex	4	0
Castoreum ..... unc.	4	4
Caryophilli ..... lb.	11	0
Cassiæ Cortex	8	0
Catechu Extractum	2	3
Cetaceum	3	0
Cera flava, 3s 6d. alba	3	6
Cerata, from 2s. 6d. to	4	0
Cinchonæ cordif. Cort.	9	0
——— lancif. Cort.	13	0
——— oblongif. Cort.	16	0
Cinnamomi Cortex	17	0
Coccus (Coccinella)	60	0
Colocynthidis	8	0
Copaiba	7	0
Cornu usti	1	0
Cretæ ppt.	0	8
Croci stigmata	64	0
Cupri sulphas	1	0
Cuprum ammoniatum	6	0
Curcumæ Pulvis	2	6
CONFECTIO Aromatica, 8s. 6d.—Aurantii, 2s. 9d.—Opii, 4s. 6d.—Rosæ Gallicæ, 1s. 10d.—Rosæ Caniæ, 2s. —Scammoniæ, 15s. 0d.—Sennæ, 2s. —Amygdalæ, 5s. 0d.		
EMPLASTRA Ammon. 8s. 0d.—Cumini, 2s.—Galbani Comp. 2s. 6d.—Lyttæ, 6s. 6d.—Opii, 2s. 6d.—Plumbi, 1s. 6d. —Resinæ, 1s. 6d.—Roborans, 2s. 0d. —Saponis, 2s. 6d.—Hydrarg. 2s. 6d. —Hydrar. cum Amm. 6s. 0d.		
EXTRACTA Anthemidis, unc. 1s. 0d. —Belladon. 1s. 0d.—Cinch. 3s 0d.—Cinch. resinos. 4s. 0d.—Coloc. 2s. 0d. —Coloc. comp. 1s. 0d.—Conii, 0s. 6d. —Gent. 0s. 5d.—Glycyr. lb. 3s 0d.—Cascar. unc. 3s. 0d.—Hæmatoxyli, 0s. 5d.—Humuli, 0s. 9d.—Hyoscyami, 1s. 0d.—Jalapæ, 1s. 6d. Res. 2s. 8d. —Opii aquos, 3s. 8d.—Opii resinos, 3s. 0d.—Papaveris, 0s. 6d.—Rhæi, 2s. 4d.—Sarsapar. 10d.—Taraxaci, 6d.		
Ferri carbon. 1s. 0d. sulph. lb.	1	0
Ferrum Ammoniatum	3	6
——— Tartarizatum	4	0
Galbani Gummi-resinæ	8	6
Gentianæ Radix	1	3
Guaiaci Resina	7	6
Hydrargyrus purificatus	5	4
——— cm Creta	4	0
Hydrargyri Oxymurias	8	0
——— Submurias	8	6
——— Hydros.	10	0
——— Nitrico-Oxydum ..	8	6
——— Oxydum Rubrum	8	0
——— Sulphuretum Nig.	3	6
——— Præcipitatus Alb.	8	0
Hellebori nigri Radix	2	6
Ipecacuanhæ Radix	20	0
Jalapæ Radix	6	6
Kino	12	0
Liquor Plumbi Acetatis M. lb.	1	0
——— Ammoniæ .... P.L.	2	8
——— Vol. Corn. Cerv.	1	3
Linimentum Camphoræ comp.	5	6
——— Saponis comp. ..	5	6
Lichen Islandicus ..... P. lb.	1	9
Lini Semina	0	6
Lyttæ	11	0
Magnesia	3	6
——— Carbonas	3	0
——— Sulphas	1	2
Manna optima	6	0
Mel Rosæ	2	6
Moschus pod, 24s. in gr. unc.	40	0
Mastiche ..... lb.	5	6
Myristicæ Nuclei	25	0
Myrrha elect.	6	6
Opium (Turkey)	26	0
Oleum Amygdalæ ..... lb.	4	4

Oleum Anisi	unc.	2 0
—— Anthemidis		5 0
—— Cinnamomi Cassiæ		8 0
—— Caryophili		5 0
—— Cajuputi		8 0
—— Carui		1 9
—— Juniperi		0 9
—— Lavandulæ		4 0
—— Lini	cong.	8 6
—— Menthæ piperitæ	unc.	4 0
—— viridis		3 0
—— Olivæ, from 14*s.* 0*d.* to		24 0
—— Origani	unc.	2 0
—— Pimentæ		4 6
—— Ricini, from 7*s.* 0*d.* to		10 0
—— Rosmarini	unc.	0 9
—— Succini	2*s.* 4*d.* rect.	2 6
—— Sulphuretum	lb.	1 6
—— Terebinthinæ rectif.		2 0
Oxymel Scillæ		3 0
Papaveris Capsulæ (per 100)		2 4
Plumbi Carbonas	lb.	0 8
—— Superacetas		2 2
Potassa Fusa	unc.	0 6
—— cum Calce		1 6
Potassæ—Nitras, lb. 1*s.*—Acetas, 8*s.* —Subcarbonas, 1*s.* 2*d.*—Carbonas, 4*s.* —Sulphas, 1*s.*—Sulphuretum, 1*s.* 6*d.* —Tartras, 3*s.*—Supertartras, 1*s.* 9*d.*		
Pilulæ Hydrargyri		6 0
—— Aloes comp.		8 0
—— cum Colocynth.		16 0
—— Scillæ Compos.		6 6
—— e Styrace		48 0
Piper longum et Nigrum		2 6
Pimento	lb.	2 4
Pulvis Aloes cum Canella		6 6
—— Compositus		10 0
—— Antimonialis		7 0
—— Cinnamomi Comp.		16 0
—— Cornu cervi cum Opio		14 0
—— Cretæ Composit.		8 0
—— cum Opio		8 0
—— Kino Compositus		12 0
—— Scammoniæ Comp.	unc.	2 6
—— Sennæ Composit.	lb.	8 0
—— Tragacanthæ Comp.		5 0
Resina Flava et Nigra		0 5
Rosæ Folia		7 6
Ras Quassiæ		1 6
Rhæi Radix (Russia)		30 0
—— (East India)		14 0
Sapo (Spanish)		2 6
Sarsaparilla Radix Inc.		5 0
Scammoniæ Gum-Resina	unc.	2 6
Scillæ recens, 1*s.* 3*d.* siccata		5 0
Sennæ Folia Opt. Alexand.		6 6
Serpentariæ Radix		30 0
Simaroubæ Cortex		4 0
Sodæ Boras		4 0
—— Carbonas		7 0
—— Subcarbonas		1 4
Sodæ Sulphas		0 8
—— Phosphas		2 8
Soda tartarizata	lb.	2 4
Spongia usta	unc.	1 3
Spiritus Ammoniæ	M. lb.	3 6
—— aromaticus		4 6
—— fœtidus		3 6
—— succinatus		4 6
—— Cinnamomi ver.		3 6
—— Juniperi Compos.		3 0
—— Lavandulæ		4 6
—— Compos.		5 0
—— Myristicæ		3 0
—— Pimentæ		3 0
—— Rosmarini		3 0
—— Ætheris Aromaticus		6 0
—— Compositus		6 0
—— Nitrici sp. gr. 860		5 6
—— Sulphurici		6 0
—— Vini rectificatus		24 0
Syrupi, from 1*s.* 8*d.* to		3 0
Sulphur		0 8
—— Præcipitatum		1 0
Tamarindus opt.		2 6
Terebinthina Vulgaris		0 9
—— Canadensis		8 0
—— Chia		6 0
Tragacantha Gummi		10 0
Tincturæ—Aurantii, M. lb. 3*s.* 9*d.*—Aloes, 4*s.* 0*d.*—Aloes Comp. 9*s.* 6*d.*—Assafœt. 5*s* 6*d.*—Balsa. Tolut. 5*s.* 6*d.*—Benzoini Comp. 6*s.* 9*d.*—Camph. Comp. 4*s.* 0*d.*—Cardam. 4*s.* 0*d.*—Cardam. Comp. 4*s.* 0*d.*—Calum. 3*s.* 9*d.* Capsici, 3*s.* 9*d.*—Cascar. 4*s.* 6*d.*—Cast. 7*s.* 0*d.*—Catechu, 4*s.* 0*d.*—Cinchonæ, 6*s.* 0*d* —Cinch. Comp. 6*s.* 0*d.*—Cinch. Am. 7*s* 0*d.*—Croci, 6*s.* 6*d.*—Digitalis, 4*s.* 6*d.*—Ferri Ammon. 4*s.* 0*d.*—Cinnam. 4*s.* 6*d.*—Cin. Comp. 4*s.* 6*d.* Gent. Comp. 4*s.* 0*d.*—Guaiaci, 6*s.* 0*d.* —Guaiaci Am. 6*s.* 0*d.*—Helleb. Nig. 4*s.* 6*d.*—Humuli, 5*s.* 0*d.*—Hyoscyami Nig. 4*s.* 6*d.*—Jalap. 4*s.* 6*d.*—Japon. 4*s.* 6*d.*—Fer. Mur. 5*s.* 0*d.*—Kino, 5*s.* 0*d.*—Lyttæ, 3*s.* 9*d.*—Myrrhæ, 4*s.* 6*d.*—Opii, 7*s.* 0*d.*—Opii Camph. 4*s.* 6*d.*—Quassiæ, 3*s.* 9*d.*—Rhei, 4*s.* 6*d.* —Rhei Comp. 4*s.* 0*d.*—Scillæ, 4*s.* 6*d.* —Sennæ, 4*s.* 9*d.*—Serpent. 6*s.* 0*d.*—Valer. 4*s.* 6*d.*—Valer. Am. 5*s.* 6*d.*—Zingiberis, 4*s.* 6*d.*		
Valerianæ Radix		1 8
Veratri Radix		1 6
Unguenta—Hydrar. fort, 5*s.* 0*d.*—Hydrar. Mit. 3*s.* 0*d.*—Hydrar. Nitratis, 3*s* 3*d.*—Hydrar. Nitrico-oxy 2*s.* 9*d.* —Sulph. Comp. 1*s.* 9*d.*—Alia ung. 1*s.* 8*d.* to 2*s.* 0*d.*		
Uvæ Ursi Folia		2 4
Vina—Aloes, 3*s.* 6*d.*—Antimoniale, 3*s.* 0*d.*—Ferri, 3*s* 6*d.*—Ipecac. 5*s.* 6*d.* —Opii, 8*s.* 0*d.*		
Zinci Oxydum		4 6
—— Sulphas purif.		2 0
Zingiberis Radix opt.		2 4

Leeches, 24*s.* per hundred.—Essential Salt of Lemons, 4*s.* 6*d.* per dozen.

METEOROLOGICAL REGISTER.

From September the 25th, to October the 20th, 1814.

Kept by C. BLUNT, Philosophical Instrument Maker, No. 38, Tavistock Street, Covent-Garden.

Moon.	Day.	Wind.	Barometrical Pressure. Max.	Min.	Mean.	Temperature. Max.	Min.	Mean.	
	26	NE	29·77	29·76	29·765	58	47	52·33	Fair
	27	NE	29·82	29·74	29·295	58	48	53	Fair
	28	NE	29·90	29·82	29·867	56	46	52·33	Fair
○	29	ENE	30·02	30·—	30 005	56	47	51·33	Fair
	30	E	30·—	29·99	29·995	55	45	50·33	Fair
	1	E	30·02	30·02	30·02	55	39	47	Fair
	2	E	30·1	30·1	30·1	57	43	48·33	Fair
	3	E	30·22	30·18	30·196	57	40	47·66	Fair
	4	E	30·23	30·19	30·207	58	42	48·33	Fair
	5	E by S	30·07	29·95	29·997	59	39	49	Fair
◐	6	SE	29·85	29·72	29·767	59	39	46·33	Fair during Day. Foggy at Night.
	7	SW	29·86	29·80	29·83	59	37	47·33	Fair dur. Day. Fl. Show. p.m. Rain at Night
	8	W, WNW	29·96	29·90	29·922	54	35	44	Fair
	9	NNW	30·13	30·—	30·043	48	29	43	Fair
	10	SE	30·13	30·10	30·115	50	35	40·33	Fair
	11	SW	30·—	29·84	29·982	54	45	49·33	Fair
	12	W	29·70	29·66	29·927	58	50	53	Fair
●	13	S	29·61	29·4	29·533	65	51	57·66	Cloudy Fair
	14	S	29·47	29·4	29·43	65	48	60	Cloudy
	15	S	29·59	29·53	29·555	60	47	52·66	Rain, p. m. Fair
	16	S by W	29·7	29·6	29·645	57	42	49·66	Fair
	17	NW	29·74	29·65	29·686	59	49	53·33	Brisk Wind Fair. Calm
	18	SW	29·4	29·18	29·297	65	40	52	Cloud. in Morn Heavy Rain pm & dur. Night
	19	SW	29·22	29·2	29·213	54	42	48·66	Rain
	20	SW	29·44	29·39	29·41	52	40	45·66	Cloudy

RESULTS.

Mean barometrical pressure	29·792	Mean temperature		49·7 deg.	
Maximum	30·23	wind at	E	Maximum 65,	wind at S
Minimum	29·2	——	SW	Minimum 29,	—— SE

Scale exhibiting the prevailing Winds during the Month.

N	NW	W	SW	S	SE	E	NE
1	1	2	5	4	2	6	4

	Mean barometrical pressure.	Mean temperature.
From the full moon on the 29th Sept. to the last quarter on the 6th October	30·074	48·854
—— last quarter on the 6th, to the new moon on the 13th	29·94	46·188
—— new moon on the 13th, to the first quarter on the 21st	29·471	52·453

Observations.

Observations.—October, 1814.—Greatest height of the mercurial column in the barometer, 30·23 inches on the 4th of October. Wind at E., the atmosphere clear, and the mean temperature of the 24 hours, 48·3 of Fahrenheit.

The lowest point of the mercurial column, 29·2 in. on the 19th. Wind at SW., the day and night rainy in smart showers, and the mean temperature of the 24 hours, 48·6 of Fahrenheit.

The highest temperature 65 on three several days, on the 13th and 14th with the wind at S., and on the 18th the wind SW. The highest mean temperature of the 24 hours is on the 14th, 60; the wind at S., and the mean barometrical height for the same period, 29·43 inches.

The lowest temperature 29, on the 9th; the wind NNW.; the atmosphere clear; the mean temperature of the 24 hours, 49; the mean barometrical height for the same period, 30 inches.

Wind N one day, NW one day, W two days, SW five days, S four days, SE two days, E six days, NE four days; the points of the wind being taken as they stood at eight, a. m.

Rain on four days, and during the night of those days; a considerable fog on the night of the 6th; the lowest temperature during that night, 39; the wind E by S.

From the full moon on the 29th September, to the last quarter on the 6th October, the mean barometrical pressure 30·07 inches; the mean temperature of that period, 48·85.

From the last quarter on the 6th, to the new moon on the 13th, the mean pressure, 29·94 inches; the mean temperature of the period, 46·18.

From the new moon on the 13th, to the first quarter on the 21st, the mean pressure, 29·47 inches; the mean temperature of that period, 52·45.

The mean barometrical pressure of this month's portion of the register, 29·792 inches; the mean temperature of the period, 49·7.

MONTHLY CATALOGUE OF MEDICAL BOOKS.

A PRACTICAL TREATISE on Porrigo, or Scald Head; and on Impetigo, the humid or running Tetter: with coloured Engravings, illustrative of the Diseases. By the late Robert Willan, M.D. F.R.S. and F.A.S. Edited by Ashby Smith, Member of the Royal College of Surgeons. 4to. 12s.

Cases of Tetanus and Rabies Contagiosa, or Canine Hydrophobia; with Remarks, chiefly intended to ascertain the Characteristic Symptoms of the latter Disease in Man and certain Brutes, and to point out the most effectual Means of Prevention. By Caleb Hillier Parry, M.D. F.R.S. 8vo.

A Synopsis of the various Kinds of Difficult Parturition; with Practical Remarks on the Management of Labour. By Samuel Merriman, M.D. Teacher of Midwifery. Second Edition, with considerable Additions. 12mo. boards, 6s.

Observations on Adhesion; with Two Cases, demonstrative of the Powers of Nature to reunite Parts which have been by Accident totally separated from the Animal System. By William Balfour, M.D. 8vo. sewed, 1s. 6d.

TO CORRESPONDENTS.

Several Communications have arrived too late for publication this Month, but will appear in our next Number.

THE

Medical and Physical Journal.

6 OF VOL. XXXII.] DECEMBER, 1814. [NO. 190.

"For many fortunate discoveries in medicine, and for the detection of numerous errors, the world is indebted to the rapid circulation of Monthly "Journals; and there never existed any work to which the faculty in "EUROPE and AMERICA were under deeper obligations than to the "Medical and Physical Journal of London, now forming a long, but an "invaluable series."—RUSH.

For the Medical and Physical Journal.

REPORT *of* DISEASES *from* OCTOBER *24th to* NOVEMBER *24th*, BY MR. WANT.

TYPHUS FEVER has occurred in far greater numbers than I have known for several years past. Some of the cases, as may be expected, were slight, and easily subdued by the ordinary remedies; while many have been of a malignant and fatal nature. A few years since an unusual prevalence of Typhus was attributed to scarcity; but as this happily does not exist at present, we must look to other sources for its origin.

SCARLATINA continues to prevail, and has much increased in severity since the last report. A friend has communicated to me four fatal cases, which came under his care in succession. On enquiry respecting the treatment pursued, I learned that Peruvian bark had been given in large doses, the pernicious effects of which I have too often had occasion to witness. It is very questionable whether any known *medicine* be deserving of confidence in these cases. But cold ablution of the skin rarely fails to mitigate the symptoms, and as rarely fails to cure. From experience I should be inclined to say, that cold water drank and applied externally, while the heat of the skin is above the natural standard, are the only remedies on which dependance can be placed. The dropsical swelling of the legs, often consequent to this disease, may generally be removed by immersing the parts in water, as hot as can be borne, every night at bedtime.

In a poor girl about eight years of age, notwithstanding the febrile symptoms were each time removed by the ablution of the skin, they continued to recur for the space of

three weeks. Mention was made of sore throat, but, as no great stress was laid on it, a common gargle was enjoined, which was used without benefit. On examining the fauces, the tonsils were found to be very much enlarged, and externally a swelling existed behind each angle of the jaw, corresponding in situation with the tumid glands. I recommended an incision to be made by a scalpel through their substance, which, in general, I have experienced to give instant relief. The incision was opposed, and a blister was applied to each angle of the jaw. This produced an abatement of the difficulty of swallowing; but no permanent good was effected until a quantity of matter was evacuated by the rupture of an abscess in each tonsil. Both the fever and the difficulty of swallowing immediately disappeared.

Among the inflammatory complaints, Catarrh, Pneumonia, and Measles, hold a distinguished place; but nothing deserving of remark has been observed.

Rheumatic cases have fallen under my notice in great abundance. The disease is now very prevalent. In its acute form, I have seen much benefit arise from the use of Colchicum. In two severe cases of this affection, after it had degenerated into that species which many would call Rheumatic Gout,* the colchicum removed, in one night, an ailment of upwards of two months' continuance. In Chronic Rheumatism it is not so effectual, but is still serviceable in many cases.

A variety of remedies were ineffectually tried with a view to relieve the intense pain of a severe Scald in both legs, occasioned by boiling water. Lime-water and linseed oil, cold water, saturnine and opiate lotions, terebinthinate applications, and poultices, were employed in succession, with large doses of opium internally. Observing that some parts of the limb were covered with innumerable *small* vesicles, and that the pain was more intense in them than in other places, I carefully opened the whole of them by the scissars, or by puncturing with a needle where they were too small to be cut. The effect of this practice was almost immediate in removing the agony of the pain. The limbs were then enveloped in a linseed-meal poultice, and the patient experienced comparatively little pain from that time.

Paralysis of the Wrists, consequent to working in lead, was observed in a man *who makes bougies, and spreads the*

* An inflammatory and painful swelling in the larger joints, flying from one to the other, but *without fever*.

ships

sive plaster for the shops. The patient has, during the last seven years, been attacked as many times with COLICA PICTONUM. The use of the wrists was lost on the first invasion of the complaint.

Being incapable of taking opium from its effects on the head, the only remedy which gives him relief from pain is large potations of gin, which he never takes at any other time. He ascribes his sufferings solely to the fumes of the litharge plaster, and to the composition used in making bougies, both of which he prepares in large quantities.

The term PSEUDO-SYPHILIS has been used to express the character of a train of symptoms observed in a gentleman practising in the Inner Temple, which so closely resembled syphilis in their progress, that much caution was necessary in forming a correct judgment of their nature. It is much to be feared that many are made victims to the confounding of these two diseases. Mercury, the remedy of the one, generally aggravates the other; and, what is of infinitely greater moment, it often happens that the increase of the symptoms, occasioned solely by it, is supposed to be the mark of virulence in the disease, requiring a more vigorous prosecution of the mercurial course. I have recently witnessed two cases, where, in the practice of others, exfoliations of the lower jaw bones have been produced by the imprudent use of mercury in diseases mistaken for venereal.

In this gentleman, ulcerations were seen on the penis, but on minute examination, they were discovered to be without the hardened base common to venereal chancres; and they healed by the application of lunar caustic in solution in about a week. After these, another appeared on the prepuce, which was treated in the same manner, and without my advice. A solitary gland in the left groin was enlarged, and continues so at this time, to the great annoyance of my patient, who is still not without apprehensions that it may prove to be venereal.

Within these ten days, a period of six weeks having elapsed since the first attack, an ulcerated sore throat, of a suspicious nature, appeared, unaccompanied by febrile symptoms. The pulse was accelerated. He was much troubled with head-ach, and occasional bleeding from the nose, and the prostration of strength was so great as to prevent his leaving the house. A mixture of sulphuric acid was directed three or four times a-day, with a common gargle. The throat gradually amended under this treatment, but a new symptom arose in its stead. A plentiful eruption of copper-coloured spots, of various sizes, were seen in most parts of the body; an erysipelatous inflammation attacked the pre-

puce and glans; and the seat of the former ulcerations was much indurated. From attention to the history of the case, I still thought myself justified in retaining my original opinion, and therefore made no alteration in the treatment. The spots were dying away; and the patient went to Margate to make trial of sea-bathing. The plummer's pill was the only remedy prescribed for him. He returned in the course of a month, with evident amendment of health. The eruption is still visible, but what the results of the case may be is yet uncertain.

I was desired yesterday evening to be present at the dissection of a child *supposed* to have died of HYDROCEPHALUS. He had been drooping for the space of six months, but no remedies, excepting occasional purgatives, had been resorted to. About a fortnight before his death, he was seized with convulsions: on recovering from them, he complained of pain in his head, and soon relapsed into a state of delirium and coma. From this he was occasionally roused by the violence of the pain, which manifested itself by loud screamings. The brain and its membranes were found to be greatly inflamed, and the substance of the former was unusually firm. A very small quantity of fluid comparatively was found effused into the ventricles. A modern author affirms that Hydrocephalus is *never* the consequence of inflammation of the brain or its meninges, which is too obviously fallacious, to require refutation; but the preceding case is a proof that inflammation of the brain may be *mistaken* for that disease, which should operate as a caution to practitioners in deciding on the treatment to be pursued.

11, *North Crescent.* JOHN WANT.

For the Medical and Physical Journal.

Letter from MR. ASSALINI *to* MR. WANT.

My Dear Sir,

I YESTERDAY found, in the Number of your excellent Journal for November, an article which concerns me, and reflects on the surgeons of Italy. I never suffer criticism to give me a moment's uneasiness. I am equally indifferent to praise or censure. Time will decide in any points of difference between us.

I hope by this time you have read my *Manuale di Chirurgia*. You will discover in that publication, as in the works of Nannoni, Flajani, Molinelli, Manzoni, Ruggieri, Paletta,

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* Dr. Carmichael Smith,

Monteggia,

Monteggia, and other Italian authors, that the writer, in drawing up that notice, would have been more prudent in first learning what they have said *against the propriety* of dividing the inner coat of the artery in the treatment of aneurisms, before he accuses them of inattention to the fact of its rupture on the application of the ligature.

We were fully aware of the observations of Dr. Jones; but his conclusions are by no means confirmed in a great many cases, of which the man who sunk from hæmorrhagy at Guy's Hospital is a melancholy proof.

Experiments recently made on the horse and dog, an account of which I communicated to you at our last interview, prove that the rupture of the inner coat of an artery is not sufficient for the obliteration of its cavity, or for the prevention of hæmorrhagy. The dog, whose carotid arteries were tied in the manner recommended by Jones, died of hæmorrhage. The carotid of the horse, on which a ligature was applied in the same manner, was found, on examination, to be still pervious; while the other carotid, on which *my compressor arteriæ* was applied, in the course of twenty-four hours was most completely obliterated. On opening it, two clots of firm coagulable lymph were found, one on each side of the stricture made by the ligature. You will oblige me by examining those preparations, and giving such account of them in your next Number as you may deem necessary.*

7, *Manchester-street*, PAUL ASSALINI.
Nov. 21, 1814.

For

FROM THE EDITORS.

*. It has been explained, and we believe satisfactorily, to Mr. Assalini, that we are incapable of making any statement *as a reflection* upon the surgeons of Italy, and still less upon so celebrated and intelligent a practitioner as himself, of whose abilities we entertain the highest opinion. In making the remark respecting the rupture of the coat of an artery consequent to the use of the ligature, we were actuated by a desire, not so much to proclaim the ignorance of our continental friends, as to seize the opportunity of giving general circulation to a fact, which seemed to us of the utmost importance in our operations on the trunk of an aneurismal or wounded artery, and which we have reason to believe is yet unknown to many of our junior practitioners. It appears from the above statement of the professor, that we have been unjust in ascribing to the Italians an ignorance of Dr. Jones's experiments, because they were not only acquainted with them, but have disputed the accuracy of the doctor's conclusions. Though we believe

For the Medical and Physical Journal.

On Emetics in Diabetes Mellitus; by Dr. J. R. WALKER, of Huddersfield.

THE case here detailed is intended to show the successful exhibition of Emetics, repeated every other morning, in Diabetes Mellitus, in a patient who had been sinking for many months, without relief from the ordinary remedies. The patient, Thomas Ainsley, æt. 21, a resident in this neighbourhood, had laboured for two years past with symptoms of dyspepsia, but during the last year he had felt more particularly a craving and uneasiness of stomach, with polydipsia. The amount of the urine had varied at different times since April last, but thinks it has seldom been less than six or eight pints a-day. On the 4th of September last it exceeded eleven pints, was somewhat of a greenish tinge, and left a residuum like treacle on evaporation. It also fermented with yeast, and had very much of that hay-like odour alluded to by Dr. Latham in his Treatise on Diabetes. Without entering into any scruples whether the stomach was primarily or only sympathetically affected, I resolved to combat what appeared to me to be one essential part of the disease in its present stage at least, viz. the morbid affection of the stomach, not, however, with any flattering hope of success, the same treatment with slight variation having so frequently failed. The emetic powder, which I ordered, was that so much extolled by Dr. Senter in phthisis pulmonalis, viz. seven grains each of Sulphas Cupri and Ipecacuanha, to be taken every other morning fasting, without drinking any thing afterward. He commenced taking the first powder on the 4th of September, at which time his urine rather exceeded eleven pints. He was ordered also to take the following powder three times a-day.

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believe the rupture of the inner coat of an artery to be essential to the speedy union of its sides, and consequently to the success of an operation upon it; we think it important to present our readers with the fact contained in this letter, that surgeons of the first rank in Italy are of a contrary opinion; and it is equally certain that some practitioners of eminence in this metropolis agree with them as to its being neither essential or useful. We find on inquiry that the experiment at St. George's was made under mistaken impressions; and, although most, if not all, of the gentlemen then present would have joined us in asserting the truth of our previous statement, it was afterwards distinctly ascertained to have been founded in misconception.

R. Ferri

℞. Ferri Ammoniati.
Uvæ Urs. Contus. āā ℈j. M. ft. Pulvis Ope Vehiculi crassi exhibendus.

He kept his bowels constantly open by means of the phosphate of soda, and was ordered to confine himself strictly to animal diet.

I saw him in about a fortnight after, at which time, though his urine far exceeded the liquid ingesta, it was diminished nearly two pints and a half. Excepting the addition of the dilute nitric acid, with which he acidulated his drink, and the addition of a few grains to his emetic powder, which had lost some of its strength by long use, he persevered in the same course. Before the expiration of a month, his urine was much less than eight pints; his voracity and thirst, with parched heat of the surface, were much on the decline. In six weeks from the first exhibition of the emetics, the urine fell to six pints. He kept no account either of his liquid or solid ingesta that could be relied upon, but it was evident that the functions of the digestive organs began to be more natural, and his spirits to revive. On the 5th of November his urine was diminished nearly to four pints, being more than seven pints less than it was in August, and very much improved in colour, smell, and other properties.

Here, therefore, however theorists may differ as to the primary seat of the disease, it was evidently first arrested by a class of medicines which we have been accustomed to consider as possessing at least a primary agency on the stomach, for I lay but small stress on the efficacy of his other medicines, most of which he had made trial of before I became concerned for him. I am fully aware that instances are not wanting of similar success, where the disease disappeared for a time, but returned in a few months, and the patients have died at last of it; but in so desperate a disease it is the duty of a practitioner to register every, even partial, success which he obtains, as affording the best prospect of ultimately attaining more efficacious and radical relief. The ingenuity of hypotheses has racked itself to obtain some plausible theory of this disease, one set attributing to a vitiation of the gastric juice or defective classification and assimilation, a second to a colliquation of the fluids, a third to a retrograde action of the urinary lymphatics, some to a derangement or relaxation of the kidneys, others to a defect of vital heat. One point, however, seems to be established by universal experience, that whatever has succeeded in restoring the functions of the stomach to their natural state, has never failed to alleviate some of the most obstinate and essential symptoms that constitute this formidable disorder.

Huddersfield, Nov. 5th. J. R. WALKER, M.D.

For

For the Medical and Physical Journal.

A Case of Aneurism of the Heart, Pericarditis, and Peritonitis Hepatica, followed by Ascites, which, after a violent Attack of Sciatica, terminated in Paralysis of the Abdominal Viscera and Death; by L. B. Guersent, D. M. P.

THIS disease commenced about the thirtieth year of the patient's age, with symptoms of organic affection of the heart—her respiration was short and interrupted, and at times her legs swelled. At the age of thirty-eight, two months after a favourable accouchment, she was attacked with fever, oppression, pain in the mediastinum, and puffing of the belly and legs, which were reduced by leeches, blistering the thighs, and solution of the acetate of potash, &c. The symptoms, however, returned a month afterwards with greater violence, which were calmed by bleeding in the foot; but the swelling of the legs returned, and shortly afterwards ascites made its appearance, which for three years continued to increase, although squills, digitalis, &c. were freely prescribed, without disturbing the animal functions. Her digestion was in general good; the alvine evacuations abundant, watery, and bilious. She menstruated regularly, and there never was any fever, but always had considerable palpitation of the heart, and which was distinctly visible in two carotids: the jugular veins were very large, with great determination of blood to the head, particularly about the menstrual periods. At the commencement of January 1813, she had been tapped twenty-eight times, at which time, she lost her appetite, could not sleep, was troubled with repeated fits of coughing, and considerable oppression. The abdomen being very large, she was tapped on the 10th of January, being the twenty-ninth time. The cough immediately subsided, but in the night she was attacked with violent pain in the loins, which extended to the thighs. On the 12th and 13th the pain was so great, that large doses of opium, frictions of camphor and opium, afforded no relief, and paralysis of the inferior extremities of the bladder and rectum supervened. In spite of sinapisms, blisters, irritating frictions, and the most powerful tonics, she died on the 14th, with all her moral faculties perfect.

On dissection, the heart was found enlarged to double its ordinary size, all the cavities very much dilated, and the parietes extremely thin; the auriculo-ventricular orifice was greatly diminished from ossification of the sigmoïd valves; the pericardium adhered completely to the heart; the abdomen contained about two French quarts of a yellow muddy serum; the liver was but little enlarged, and entirely covered with a very thick membraniform albuminous coat.

For

For the Medical and Physical Journal.

Particulars of a Case resembling Syphilis, in which the Uncertainty of Medical Opinions is strongly exemplified. By W. O.

"Lectum tuum obsessum medicis scio, hinc prima mihi timendi causa est; discordant enim de industria, dum pudet novi nihil afferentem alterius hæsisse vestigiis, nec est dubium (ut eleganter ait Plinius,) omnes istos famam novitate aliqua aucupantes, Animas statim nostras negotiari, et in hac sola artium evenire ut cuicunque se medicum profitenti statim credatur, cum sit periculum in nullo mendacio majus. Nulla præterea lex quæ puniat inscitiam capitalem, nullum exemplum vindictæ: discunt pericilis nostris, et experimenta per mortes agunt. Medico tantum hominem occidisse impunitas summa est, horum turbam velut inimicorum aciem, Clementissime Pater, iutuere. Instruat te illius infausti epigrammatis memoria inscribi jubentis in sepulcro hoc solum 'TURBA MEDICORUM PERII.'"

Petrarcha ad Clementem Sextum, P.M.

ALTHOUGH it be very uncommon to find the excellent pages of the Medical Journal occupied with the productions of persons not of the medical profession, yet I hope I may be allowed to present a history of my own case, with such remarks as have struck me at various periods of my complaint, not only on the symptoms of the disease, but also on the various opinions I have had upon it from the most celebrated men of various countries; and, when it is considered that I have laboured under my affliction for several years, and instead of recovery have even become deplorably worse, I have a slight hope of turning the attention of the medical world to the consideration of similar cases; for I hope, that, without any degree of disrespect to your profession, I may acknowledge, that I have often been induced to upbraid its practitioners; as I believe I have experienced more of the uncertainty of their art than any man alive, inasmuch as I have even had opinions entirely contradictory as to the nature of my disease, and have been advised by one medical man to avoid, as certainly noxious or even destructive, what another has recommended to me as the only remedy for my complaint. I may also observe, that, during the series of years that I have been afflicted, I have, as far as books could assist me, endeavoured to form an opinion myself on the nature of my disorder, but so fluctuating has been the state of my mind among these contending authorities, that my opinion has even been as variable as that of my medical advisers.

About fifteen years ago, my father expressed a wish for my travelling on the Continent, previous to which time I had enjoyed an excellent state of health; and I may add, that our family has been remarkable for very long lives, and the very best health, for many ages.

A year after my departure from England I arrived at

Paris, (for, although the countries were at war, yet I was able, by particular circumstances, to travel over a considerable part of France,) where I had the misfortune to fall into great dissipation, the consequence of which was, beside the bad effects of excess in eating, drinking, and late hours, an attack of the venereal disease, in the form of chancres and bubos.

I applied to the first medical advice; M. Swediaur attended me; I took mercury in various forms, without its producing any effect upon my mouth; and, among other preparations of that medicine, they told me that in three months I had taken thirty-two grains of corrosive sublimate. My chancres healed; the bubos burst, became indolent, and for two or three years remained open, with callous edges, and sanious discharges; and now and then with slight attacks of inflammation, which was followed by an increased flow of matter, and comparative ease. By this time I had become considerably emaciated, but still continued, when sufficiently free from pain, my career of dissipation.

At length the ulcers in my groin healed, although my mouth had never been affected with mercury. I became then subject to pains of my bones, increased during the night; these particularly affected my right thigh; the limb swelled, the bone even could be felt enlarged, the disease extended from the hip almost to the knee; at length the part suppurated, and a small portion of black putrid matter discharged itself from one of the openings, for in a little time there were four places in the thigh from which purulent matter was discharged.

I now became uncommonly emaciated, my nights became miserable, the thigh-bone became more and more enlarged; I was obliged to take to my bed, and found it necessary to seek further advice. I left Paris, and went to London, without having any opinion as to the real nature of my disorder. I had much pain and swelling of my left knee, and sometimes of my elbows; I attributed it to rheumatism, or to the rheumatic gout, which has prevailed in some individuals of our family for many generations. The principal thing to be attended to, however, was the thigh. I made application to Sir ———, who affirmed that it was a case of necrosis, which opinion satisfied me for the time. I was advised to live well, and to trust more to the efforts of nature than to medical treatment; I therefore left London, and retired to my father's seat in ———, near which lived, secluded from the world, a surgeon who had been in extensive practice and great reputation. I requested this gentleman to give me his opinion as to the nature of my disorder; he seemed to

agree with Sir ———, that the thigh was in a state of necrosis; and that nature might, after a great lapse of time, effect a cure: he stated also, that there was a probability of the complaint being *syphilitic*. I was thunder-struck; it had not entered into my mind, that the remains of that disorder still prevailed in my system; I had my complaint further considered, consultations were held, when it was determined that "there was no certainty of my complaint being syphilitic." The winter then was coming on; my body, worn out with sickness and pain, could not bear even the cold of September in England; I therefore determined to spend the winter months in the Mediterranean, for which I immediately departed. In the spring, (for pain and disease are querulous and greedy of change,) I went to ——— for further advice: my complaint had gained ground, the bone of my thigh was more enlarged than ever, I had swellings along the bones of my arms and shins, my knees were greatly enlarged, my limbs wasted to skin and bone, my appetite impaired, my nights miserably painful. I here received the advice of Mr. ———. Without giving me his opinion positively as to the nature of my disorder, he advised me to try what a little mercury would do: I took two or three of the blue pills, but they produced excessive griping and tenesmus, with profuse vomiting; I was obliged therefore to intermit this medicine.

I had long been accustomed to take large doses of laudanum at night, oftentimes a tea-spoonful or more, for my impatience would not allow me to number the drops. I fled to the Continent again, an object of misery, where I fell in with an ecclesiastic who commiserated my situation; he recommended me to take a kind of balsam, which he said would improve my appetite and strengthen me. I took one drop of it between breakfast and dinner, I believe it had great effect; my appetite sometimes became ravenous, I thought my strength improved, and I was in great hopes of having found a cure, when a branch of the English army arrived. I received further advice; the army physicians recommended me to keep up my strength and spirits, by good nourishment, and did not object to my continuing the medicine that the monk had recommended to me.

About this time I met an old acquaintance of mine, who said that he had for several years laboured under a distressing complaint that had baffled all the surgeons; that he had been obliged to retire to a warm climate; that he took the advice before leaving England of Sir ———, who recommended De Velnos' medicine, which had cured him. My friend advised me to take the same, and offered to furnish

me with some that he had left. I refused his advice, however, though much importunity was made use of, as I had heard that that medicine was only a preparation of mercury, so that I concluded that Lord ——— had laboured under some irregular syphilitic disorder; for at this time I had satisfied myself, from the uncertainty of the medical opinions I had received, and the positive assertions of some surgeons of note, that my complaint was not of a syphilitic nature.

About this time I had another alarming symptom; my servant found me one day lying on the floor insensible, with my eyes fixed, and my face black, from which attack I soon recovered, but had several other similar paroxysms, during the succeeding months. I could never from my medical attendants procure a positive opinion on the nature of these attacks; one physician said, that they were occasioned by the large quantities of opium I took over night; another, that they depended on irritation about the intestines, (for I was at this time much affected with spasms of these parts;) a third, that they arose from a disease of the head: whatever the cause might have been, however, I determined to proceed to England immediately, and spend the summer there. I accordingly took ship for a port whence there is often a conveyance to England. This port was a great naval depot; there was a surgeon there who was spoken of as a man of great knowledge in his profession, and I was advised to consult him.

At this time, beside my left thigh being in *statu quo*, there were tumours appearing and disappearing upon my shin bones and arms, soft tumours to the feel, containing a fluid, appeared about my forehead; one of the orifices of the left thigh discharged a thin matter; I was excessively emaciated, so weak that I scarcely could walk, and my nights were passed with great uneasiness; I was often subject to great pain about the stomach, and my appetite was very bad. I took this gentleman's advice, who gave me a positive opinion as to the nature of my case, which I was glad to find was the same as my own, and I was the more gratified on receiving a positive opinion, as most others of my medical advisers had given a doubtful one, and left me in an uncomfortable uncertainty.

This gentleman told me that my case was certainly not *venereal*, but occasioned by the *mercury* that I had taken; he advised me, therefore, by all means never again to touch a grain of mercury, as I valued my life; and that I might attribute to that medicine all my complaints. I therefore continued still to take my stomachic medicine, and trusted to good living for my recovery.

I remained

I remained under this gentleman's treatment about a month with little change of symptoms, when I was fortunate enough to procure a passage in a ship of war to England; but judge my astonishment, on my putting myself under the treatment of the surgeon of the ship, who altogether controverted the opinion of the former surgeon, and was as positive the contrary way. He told me that he considered most of the symptoms under which I laboured as syphilitic; that the fits of insensibility under which I laboured were probably epileptic, occasioned by accidental irritation, that the affection of the thigh had probably a syphilitic origin, that the swellings of the bones of the arms and legs were venereal nodes, the tumours about my forehead also venereal, that I might also be subject to gouty or rheumatic affections, and that the large doses of laudanum impaired my appetite and weakened my digestion; and he even doubted as to the reality of my thigh-bone being in a state of necrosis, asking me whether there had been any fragments of bone discharged, whether a probe had been introduced, and the dead bone felt, and whether there was a sort of fleshy tumour about the orifice. To these questions I replied, when the discharge first took place, the matter was fetid and black; I thought it osseous or dissolved bone, but that there were no particles of bone mixed with it, so that I was not positive whether it really consisted of bony matter or not. I gave an answer to the second question, by permitting the surgeon to inspect the orifices, who found that there was *no* fleshy tumour about the openings. I had not heard of this appearance being a common indication of necrosis before, and I began myself to be doubtful on that head, although the surgeon did not deny that there might be necrosis present; yet he affirmed, that the disease of the thigh-bone might be similar to those of the legs and arms, but in a more advanced state. What could I do? I was in a greater degree of uncertainty than ever; I had received two opinions directly opposite to each other, one attributing to mercury all my sufferings, the other as positively presenting that medicine to me as the only cure for my disorder! How could I determine the true state of the case among such jarring opinions? How could I fix upon the most intelligent of these two surgeons, both of them holding public situations, and both looked up to as proficients in their professions? I could only from the opinions they gave me endeavour to elicit the truth; I shall describe, therefore, what each said, in proof of the validity of his opinion: and I cannot here fail from observing, that to many the subject may seem to tend to ridicule, and bring to their recollections the contest between the doctors in Gil Blas, and other

other books, where similar opprobria to the profession are made use of. When they call to mind, however, that *here* was no meeting between the two surgeons, and no dispute in the presence of their patient, I hope they will have a different view of the matter; and I entreat that they will have some commisseration for my sufferings, and with me agree, that it would certainly be of use to other sufferers labouring under the same symptoms, to determine accurately on the subject, and not attribute symptoms to one cause which are produced specifically by another.

I recollect well, that, when I conversed with the gentleman who determined my case to be mercurial, and who recommended me, as I valued my life, never to swallow a particle of mercury again, he gave me an account of what he had met with in the course of his practice, which induced him to form the opinion he now gave me, and which, he said, since that time, had been further corroborated.

"I formerly (said he) was ordered to take charge of the patients in a large hospital, the former surgeon having died. In that hospital I found near thirty miserable objects labouring under what had been called venereal ulcers, and other syphilitic affections; some of these appeared to be at the last gasp of life, being wasted to the bone, with large ulcers in the groins, legs, throats, heads, &c. and many of them suffering the most grievous pains. On a reference to the treatment they had been put under by the former surgeon, I found that they had uniformly been taking corrosive sublimate, some of them for several months, during which time, instead of their sores healing, and their pains diminishing, they became worse, and many of them were as much reduced as you are. The idea then struck me, that these patients, instead of labouring under syphilis, were suffering through the effects of mercury. I therefore laid this medicine entirely aside, prescribed a better food for them, and gave them tonic medicines; in a little time their ulcers put on a better appearance, and in two or three months their cures were complete. I see but very little difference between some of these cases and your's: *they* had ulcers, so have *you; they* had swellings and pains of the bones, so have *you; they* had taken much corrosive sublimate, so have *you; they* were greatly emaciated, so are *you*. I would strongly recommend to you, therefore, to preserve a generous diet, use as much exercise as your health will admit, and avoid mercury as your bane, by which means I have hardly a doubt, but that in time you will have as perfect a cure as the patients I have just mentioned to you."

Such an opinion could not fail of being very gratifying to me;

me; it was also consonant to my own; it enlivened my spirits, and I confidently expected, by an adherence to it, that I should in the end perfectly recover my health.

So far for my antisyphilitic adviser,—now for my syphilitic one. This gentleman, before giving me his ideas on the subject, seemed to wish me to inform him what had been the opinions of the medical men I formerly had consulted, and I must confess that I was a little disingenuous with him on that head. We were perfect strangers to each other, and I wished to have his opinion unbiased by that of others. I however told him the purport of the last advice I had received, which was necessary to account for the treatment I was then employing, and it was indeed that which was more agreeable to myself; I also mentioned that there was no supposition of my complaint being venereal; that I had consulted Sir ——, Dr. ——, Dr. ——, Dr. ——, Dr. ——, Mr. ——, Mr. ——, Mr. ——, &c. none of whom had given an opinion of that kind. He seemed to be struck with my answers, and I thought he seemed to wish to give a contrary opinion, but that from delicacy or diffidence was unwilling to controvert these high authorities.

He demanded of me, whether, when I had consulted Sir ——, I had the swellings of the shins and arms, the soft tumours about the head, &c. which I now laboured under: and on my answering in the negative, he said, that he believed, if Sir —— saw me now, he would have no doubt as to the nature of the complaint, in opposition to the ideas of the other gentlemen I had mentioned. He then gave me the following as his firm opinion: "The swellings about your head are venereal; the irregularities on the arms and shinbones are venereal exostoses; the pains you suffer in the night are the usual nocturnal pains of that disorder; the disease of the thigh-bone, whether it be really necrosis or not, has probably a like origin; you may perhaps also be subject to rheumatism or gout, mercury often produces the former, and the latter is hereditary in your family. Although you may have taken much mercury, as you affirm that your mouth was very little affected by it, it is probable you never took a sufficient quantity to cure the disorder; for I have great doubts whether mercury will eradicate a confirmed lues, without producing some degree of ptyalism, however much may be taken. The tale told you by the surgeon of the hospital of the patients who had taken large quantities of corrosive sublimate without being cured, proves nothing in favour of your complaint not being syphilitic; the men at that place had probably taken enough mercury, or perhaps too much, to eradicate the syphilitic affections that they had at first laboured

boured under, and their ulcers then were of the nature of common indolent ulcers, the body being too weak to effect a cure; whence on a more generous diet being prescribed, nature was invigorated, and the men recovered. I would also controvert the opinion of your disorder not being syphilitic, by saying that the effects of mercury on the system are very well known. However extensively taken, mercury does *not* produce nodes on the middle of cylindrical bones, or on the cranium; the principal deleterious effects of the long-continued exhibition of mercury, are rheumatic pains; I do not know that mercury ever has been known to produce tumours on the cylindrical bones when given to patients not labouring under syphilitic affections. Why do not those persons who suffer the most violent and repeated salivations for liver complaints, fall into disorders similar to your's, if mercury had, or possibly could have, the power of producing exostoses on the head, tibiæ, or ulnæ? I believe such effects have never been heard of as consequent to such disorders, or such a remedy. I would therefore advise you strongly to return to the use of mercury; as you are very weak, take it in small quantities, use a generous diet; for the cure of your thigh-bone trust much to the efforts of nature; when you arrive in England, take the Lisbon diet-drink in conjunction with mercury, and take further medical advice."

Here I am, therefore, still in a state of uncertainty. Whom am I to believe? Am I to look upon mercury as my bane or my saviour? Unwillingness to suppose my body destroyed by the poison of syphilis, induces me to give credit to the former opinion; and the being enabled to make use of a specific and certain remedy, and thereby receive a perfect cure, tends much to turn me to the latter.

London, August 1814. W. O.

For the Medical and Physical Journal.

Extract of a Letter to the Editors.

I WAS much gratified by the perusal of your observations on Mr. Abernethy's Lectures. I consider it a misfortune that some men of high character should so often as they do amuse the world with theories and hypotheses, *which must be unintelligible even to themselves*, using terms either without meaning, or at least in a vague and indefinite sense, only calculated to check further investigation, and confound students who have little discernment! Mr. A. should read Locke on the Abuse of Words, and Boyle on the term "*Nature.*" ANON.

For

For the Medical and Physical Journal.

Upon the Folly and Danger of Hypotheses, with Remarks on Mr. Walker's innate Principle of Small-pox; by Mr. WOODHAM.

"Quicquid ex phœnomenis non deducitur, HYPOTHESIS vocanda est."
NEWTON.

WITHOUT feeling any Baconian honour, to speak in the language of a Northern critic, at hypotheses, I own I am so much of a Baconian as to entertain for them a strong dislike. Why I dislike them, is not merely because I consider it a waste of time and talents to be employed on subjects which cannot for the most part be verified either by observation or experiment, but that they are frequently productive of the most serious mischief. I will say nothing of the evils that have arisen from the treatment formerly adopted in small-pox, when the wretched victims of an absurd hypothesis, confined in close apartments, sweltering under a load of bed-clothes, and immersed in the fumes of their own perspiration, welcomed death as a kind release from both the disease and the doctor; or of the tedious and debilitating courses of mercury employed, from an equally absurd hypothesis, for the cure of the venereal disease, when rivers of saliva, if I may use the expression, were made to flow from the swollen and ulcerated mouths of the unhappy sufferers, so that, on their protracted recovery, they were left in doubt which most to execrate—the disorder or the remedy. I will pass these, and come to our own times. The spasm and atony of Cullen, whose name I repeat with reverence as my first instructor in medicine, and still more the accumulated excitability of his rival Brown, have sent numbers to an untimely grave. Fearful of debility, and from an endeavour to relax the imaginary spasm, patients labouring under fever were treated by the Cullenians principally by the exhibition of those medicines which are said to determine to the surface; bleeding and purging, the only effectual remedies, particularly in fevers occurring in warm climates, were almost entirely neglected, or sparingly used, and the disease was suffered to pursue its course, till it was removed by death, or a slow recovery. By the Brunonians, much greater evils were occasioned. To remove the accumulated excitability, the proximate cause they said of fever, not only venesection and purging were neglected, but even the feeble means of sweating. They despised and discarded these, and poured into their patient's stomachs the whole tribe of their diffusible stimuli, brandy, wine, æther, opium, &c. till they found that in exhausting their excitability they had sacrificed their patients.

These observations were suggested by the perusal of a paper in the last Number of your Journal, on Vaccination, or, more correctly speaking, on the vaccine and variolous diseases, by Mr. Walker, of Oxford, the gentleman, I believe, to whom the philosophical world is indebted for some experiments on frigorific mixtures. As in that paper there are some opinions which I conceive to be not merely hypothetical, but contradictory, I shall, with your permission, take the liberty of making on them a few remarks.

In the early part of the paper, Mr. Walker observes, "I consider every person as having the essence or innate principle of the small-pox originally in the system, which remains *dormant*, unless matured and put into action by an exciting cause, of which *infection* is the usual one, and to which every individual is so liable to be exposed, that no one has a reasonable expectation of escaping it." If by essence or innate principle, Mr. Walker had meant only a susceptibility to be acted on by the causes, whatever they be, which produce small-pox, no one, I believe, would differ from him; but then we have also originally in the system the essence or innate principle of fever, sore-throat, rheumatism, and every disease to which we are liable. He continues, "Whenever the essence or innate principle of the disease is by any means put into action, it assimilates to its own nature a certain portion of the fluids, circulating in the system more or less according to the grossness or purity of the habit, and throws out or expels them. If the whole of the original essence be expelled, or the system entirely purified of the disposition, which is ordinarily the case, the person will never be subject to a second attack. The more complete the ferment or commotion in the system may have been at the time of the disease, the greater will be the probability of the whole having been thrown off, and *vice versa*." That persons having had the small-pox, either in what is termed the natural way, or by inoculation, are not generally liable to have the disease a second time, is an established fact; but that this is owing to the innate principle, from being excited into action, assimilating to itself a certain portion of the fluids, more or less according to the habit's grossness or purity, its being afterwards wholly expelled; and that the more complete the ferment or commotion is, the greater the probability that the whole is thrown off, and the contrary, is an hypothetical assertion incapable of the smallest proof. As well might it be said that this essence or innate principle is an alkali; and that the exciting cause is an acid, that coming in contact, an effervescence or commotion takes place in the lymph or blood, and a neutral salt is formed,

formed, which being wholly expelled from the system, leaves the person ever after secure from the disease.

He goes on to observe, "It is well known, that the smallest portion possible of the matter* of the *small-pox*, or *cow-pox*, in an active state, communicated to the absorbent or inhaling vessels, is sufficient to produce either of these diseases, &c." If such be the fact, as it unquestionably is, and if matter be the *essence* which every one has originally in his system of the *small-pox*, then this matter, taken up by the absorbents, not merely as is usually understood, produces certain motions in the system, which are followed by the formation of matter similar to itself, or, as Mr. Walker terms it, assimilates a certain portion of the fluids to its own nature; but a previous process takes place, it excites the essence or innate principle into action, that is, it excites a portion of itself into action. It is, therefore, according to circumstances, both agent and patient, cause and effect, the excitement to action, and the recipient of that excitement.

Such are the inconsistencies and contradictions to which hypotheses lead. Their age, however, is hastening to a close. The inductive philosophy, of which so pure an example has been given by Dr. Hamilton of Edinburgh, is daily gaining ground; and while the spasm of Cullen, and the lentor of Boerhaave, quietly repose in the same tomb with the commotions and ebullitions of the immortal Sydenham, we cannot but regret that those illustrious characters should have indulged in such puerile conceits, or supposed that their fame was to rest on any other basis than the solid and durable one of observation and experience.

JAMES WOODHAM, Surgeon,
And Assistant-Surgeon and Apothecary to the Central Dispensary.
West Smithfield, Nov. 4th.

For the Medical and Physical Journal.

On Extra-Uterine Pregnancy; by M. CHAUSIER.

A WOMAN, thirty years of age, who enjoyed a good state of health, and had been three times pregnant, conceived herself to be in the same situation in the month of December. She felt, however, more weight than in former pregnancies, and a sense of uneasiness on the left side, to which she had never been accustomed. The gradual enlargement of the belly, the swelling of the mammæ, and es-

* By the term *matter*, I mean the *essence* of the disease, whether it be in "a *serous* or *purulent state.*"

pecially an inward movement, which became evident between the third and fourth month, left no doubt of her being with child; but at this period she complained of a fixed tensive and occasionally lancinating pain from the left ilium to the kidney on the same side, with scarcely any interval of ease. The nights now became troubled, the sleep disturbed, the appetite lost, and the strength diminished. At the fifth month, the motion of the child ceased, but the pains were become more acute and constant, extending from the lower part of the abdomen to the region of the umbilicus. Fever now supervened, with excessive thirst, sleeplessness, total loss of appetite, and sometimes diarrhœa. On the 30th of May she was received into the Hospital Maternité, then calculating it was the sixth month of her pregnancy. Her countenance was cadaverous; eyes hollow; the emaciation was extreme; respiration short, difficult, and interrupted; pulse weak, feeble, and depressed. The tension and sensibility of the abdomen were so great, that the least pressure could not be borne.* Finally, the labia and the left thigh were œdematous. On examination per vaginam, it was discovered that *the neck of the uterus preserved its natural length:* it was soft, thick, and its external orifice was *open*. On the left side, at the posterior part of the vagina, a projection was felt, seemingly of a tumour deeply situated. On the following morning, as the pains increased, she was examined again. The *mouth of the uterus was entirely open*, and gave issue to a sanguineo-mucous discharge. The finger could be readily passed into the uterus, whose parietes were thickened and cavity enlarged, but it was evidently empty. Taking this into consideration, and the tumour felt on the left side of the vagina, left no reason to doubt that the symptoms arose from a fœtus contained in the left fallopian tube. Thirty-eight hours after her admission into the hospital she died.

Dissection.—Water was found in the chest and pericardium. On opening the abdomen, a black fœtid fluid escaped. The stomach, liver, and spleen were healthy, but the omentum and intestines, which adhered together at every point of contact, were in a gangrenous state, concealing a large, soft,

* Why this patient was not bled will be a matter of astonishment to all who are unacquainted with the negligence of the French physicians in this particular. It might have relieved the symptoms, though no hope remained of the recovery of the patient unless by an incision into the abdomen for the purpose of extracting the fœtus.—TRANSLATOR.

and

and oval tumour arising from the left side of the pelvis, and occupying the left hypogastric region.

Endeavouring to raise the intestinal mass, and to detach it from the adhesions it had formed with different portions of the tumour, the latter was ruptured at its anterior part, and a fœtus escaped, with a large quantity of yellowish fluid. The cyst containing the fœtus proved to be the left fallopian tube. The walls were thin, but very vascular. The placenta attached to the inner surface of the cyst was broad and thin. When detached, the *membrana caduca* of Dr. Hunter was very distinct, and the same membrane was discovered in the uterus itself.—*Journ. de Med. May*, 1814.

For the Medical and Physical Journal.

Observations on Puerperal Fever with Diarrhœa; by WALTER CHANNING, M.D.

THE name puerperal fever has been long in use to designate a disease, incident to the puerperal state. It is applied equally by all authors, whether they consider the disease as merely inflammatory, or more strictly febrile. It is a disease, let its nature be what it may, (for it is not the design of the author of these observations to determine that,) marked by very striking symptoms, and by a no less remarkable fatality.

In private practice it is of comparatively rare occurrence, and has been found when immediately attended to on its first appearance, to have yielded, in most instances, to such remedies as the symptoms seemed to demand. In hospitals, on the contrary, under every variety of treatment, the fatality which has attended it has scarcely been paralleled by any other disease. It is not my design to give a history of the disease, its symptoms, &c. for these are all detailed in books on practice. My chief object is to relate two cases which have come under my notice, and one of them under my particular care, with such remarks as their peculiar symptoms have suggested.

CASE 1st.—Mrs. M., about forty years of age, the mother of ten children, suffered rather more during her illness with the eleventh, in December, 1812, than with either of the preceding. For some time previous to her confinement, she had been troubled with a cough; not very severe, however, and from which her general health did not seem to be sensibly affected. She was as well as usual the first day after her illness, and on the second, her physician prescribed a cathartic medicine, which her situation required. He called

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in the evening, and found her as she thought, under the operation of her medicine. But, the profluvia still being very great, their number being unusually frequent, and the patient very much exposed to cold during each operation, it was judged necessary to exhibit an opiate to moderate or check them. In the morning, however, it was found that they had neither been moderated in frequency or quantity, nor that the patient had slept during the night. The lochia were also found to be diminished. Her pulse was now very frequent and small. The strength very much prostrated and the respiration laborious. There had been chills and heat, succeeded by profuse sweats on the face and upper extremities, circumscribed redness on the cheeks, and the tongue was dry and of a brown colour.

There was but little soreness of the abdomen, and very little tension. Opium in a variety of forms, and tonic stimulant medicines, were exhibited, but with no apparent benefit. I saw Mrs. M. on the morning of the fourth day of her disease, the fifth from her confinement, I carefully counted her pulse, and found them one hundred and sixty beats in the minute, a circumscribed blush on the cheeks, and the face, neck, and upper extremities, covered with that peculiar moisture which is found, more or less, frequently to break out previous to the fatal termination of those diseases, which have been remarkable for excessive evacuations and extreme prostration of the whole system. There was no confusion of mind, and very little soreness of the abdomen, and this was most apparent on pressure. There appeared no one circumstance to warrant a prognosis at all favourable. The stomach appeared irritable from some efforts to vomit, and, from the actual discharge of a porraceous matter, ipecacuanha was given to emesis, and for a time the profluvia were a little diminished; opiates, tinct. of bark and wine combined were prescribed, and a blister was applied over the abdomen. The patient, however, continued to sink, and on the seventh day from the delivery, and on the *fifth* of the disease, she died. Previous to death the tongue was observed to be browner, the moisture mentioned above greater, and a peculiar fœtor, which had been remarked in a slight degree two or three days previous, in the evacuations, was much more apparent. Permission was not obtained to inspect the body, and we have to regret the want of light which dissection might have thrown upon the disease.

Case 2d.—Mrs. A. G., aged about twenty-five, was sick with her fourth child, in March, 1813. She had suffered extremely from a cough, of some months standing, and from abscess

abscess of the antrum highmorianum, an operation for which she had submitted to a short time before she fell pregnant. Her cough had been attended with severe pain in the side, for which blisters, bleeding, and antimonial preparations, had been used, with but little effect. This was not one of those affections which at times follow in the train of diseases incident to the pregnant state. It commenced previous to that state, and had been aggravated by exposures, and palliated by remedies, as the whim or necessities of the patient dictated. Two or three months previous to parturition, in a violent paroxysm of coughing, she thought something had been ruptured in the side, and, according to her account, a distinct sound accompanied the supposed rupture. She was bled, vesicated, the cough was quieted, and her general health at the same time improving, she was satisfied her alarms were unfounded. The cough, however, continued during parturition, which last was attended with unusual pain, and was not accomplished by any means as soon as usual. The bowels had been relaxed previous to delivery, for some days, and this continued after delivery. The lochia were more profuse than was common with her, and in the evening of the day of her confinement she nursed her child. She continued well till the beginning of the *fourth* day from her illness. She had, of her own accord, taken a dose of tinct. opii. to quell her cough; on the second day I ordered her, in place of this, the tinct. hyosciami, which I have found to answer better in similar cases. By neither of these means, however, were the usual discharge from the bowels nor the lochia at all checked, when I found her complaining on the fifth day from her confinement, the second of her disease, of pain in the head, heat, flushings, severe pain of the abdomen, and excessive alvine discharges. The pulse was increased to one hundred and forty beats in the minute, and an unusual weakness complained of. The pain of the abdomen was excruciating during the evacuations, and swelling of that part had taken place. I learnt from her nurse that the pain and discharges had appeared the day before; that the first twelve had resembled exactly the usual evacuations of a cathartic medicine; those that followed were compared to the albuminous portion of an egg, and the subsequent ones had exactly resembled those which were now observed; these were almost water, with small masses of mucous matter floating in it. I recommended and urged the necessity of a blister to the abdomen immediately, which was as strongly opposed by the patient, and though she was conscious she must sink under the violence of the diarrhœa, if not moderated, I could only prevail on her to use such internal remedies

medies as might produce that effect. Opiates with astringents were exhibited, but with no effect, and on the third day of the disease all the symptoms were aggravated; the pulse was increased to one hundred and sixty beats in the minute; the face and upper extremities bathed in a cold greasy sweat; the head suffered severe pain; the lochia were checked, and the alvine defluxions so numerous as not to be counted; abdomen swollen and painful to an excruciating degree, and the patient lying on her back unable to move; a consultation was desired, and Dr. Warren, sen. very obligingly attended. I had sent for a large vesicating plaister previous to his arrival, and he agreed with me in the propriety and absolute necessity of its immediate application. It was farther agreed to vomit the patient, and after the operation to continue the use of the opiates, one grain of solid opium, combined with one-half grain of ipecacuanha in pills, one of which was to be given every hour till the pain and alvine defluxions were checked. But little, however, was gained. The patient, though watchful for the two preceding nights, got no refreshing sleep on this; and I exhibited a second emetic on the fourth. Dr. Warren again saw her with me at noon, and it was agreed that some tonic stimulant should be added to the opiate. She passed a very uncomfortable night, but towards morning experienced some diminution of the symptoms. On the *fifth*, a severe itching of the face and breast came on. The pain and discharges were very much lessened, and her pulse, which had fluctuated from the commencement of the disease, between one hundred and forty, and one hundred and sixty, beats in the minute, were found to have come down to ninety-three, were fuller and softer. The pain in the head was lessened, and a pleasant moisture had taken the place of the sweat above mentioned. The vesicated part of the abdomen was the only place where pain was complained of, and the lochia had reappeared. The opium was now gradually diminished in quantity, and soon laid aside altogether, and the patient in a fortnight from this time was as well as puerperal women in general are, who have not suffered the degree of disease just described. Notes of the quantity of various preparations of opium, with the modes of its exhibition, and its combinations with other articles, were not kept. It was, however, very great. It was used combined with chalk julep as an enema. It was also given in form of tincture alone or combined with tinct. cort. peruv. and cinnamon, and in pills in the solid form. Port wine was craved by the patient, and towards the decline of the disease, and during her convalescence,

lescence, she was allowed it in such quantities as were agreeable to her.

There must have been observed a very striking coincidence in the leading symptoms of the above cases. These were in both, excessive alvine defluxions, an extremely morbid secretion of the vessels of the skin, a rapid and small pulse, and great prostration of strength.

It has been distinctly stated, that the pain generally so excruciating, and mentioned, by some authors, as a symptom so strongly pathognononic of genuine puerperal fever, was not present in the case of Mrs. M. It was, however, very remarkable in Mrs. G. Nor was the pain in the head by any means so severe in the former as in the latter. The pulse, however, was in both cases equally remarkable in frequency and smallness. At the close of the disease in the fatal case, it was contracted to a thread; the natural consequence of the immense evacuations from the system. In Mrs. G. this state of the pulse existing to a degree, and greater at one time than another, according as the discharges were greater or less, indicated her extreme danger. With regard to the treatment adopted in these cases, it may be remarked, that in the last there was the best evidence from the nature and successive changes in the evacuations, that the alimentary canal had been thoroughly cleansed, and the favourable circumstances which occurred were simultaneous, with the alterations produced in the evacuation. The highly morbid action of the skin was very suddenly changed; and on the fifth day, the critical one of authors who think the disease terminates by crisis, whether fatal or salutary,* a very peculiar action on the skin, in the case of Mrs. G. took place. Whether the severe itching was the consequence of some salutary efforts of nature alone, or a specific action of opium, there may not be data enough to decide. But it is an undeniable fact, that the gradual introduction of a large quantity of that article into the system, has produced this and other effects on the skin, and these, in some cases, at the moment when its good effects were becoming apparent.

To have been influenced by the distracting mass of testimony afforded by books on this puerperal disease, a very different practice might have been adopted, lest the lives of the patients had been endangered, by checking what has been called a salutary effort of nature to resolve abdominal inflammation. But in one case the disease followed literal evacuation by a purgative, and the patient sunk; in the other, no such evacuation was indicated, for the *natural* lax

* Dr. Gordon's Treatise on the Epidemic Puerperal Fever of Aberdeen, p. 74.

state of the bowels continued to the very access of the disease, and became one of its leading symptoms.

It was only moderated by a very liberal use of medicines, whose direct tendency is to diminish all the secretions, and a most rapid return of health supervened on the regulation of these formerly-diseased functions. Mr. White, of Manchester, has given us a case of "puerperal fever with diarrhœa." With this exception, scarce an author has been met with, who has given cases, in which this was a leading and very pressing symptom.

The exciting cause of the disease in Mr. White's patient, (according to his opinion,) did not exist in either of the cases above detailed, viz. the close bad air of the apartment in which the patient was confined.

Authors who have written expressly on this disease, have most of them disagreed as to its nature, its seat, its causes, prognosis, and its cure. Burserius has given a pretty full account of these various opinions, and in the system of midwifery of Mr. Burns, of Glasgow, may be found, in a note to the chapter on the same, a condensed statement of these various and discordant notions. Unquestionably, few diseases have been more fatal than this, under every kind of treatment.

This paper was written solely with a view of stating two cases, whose leading symptoms were of a nature evidently tending to a fatal exhaustion of the living powers, and still bearing a striking resemblance to what has been urged by almost all authors on the subject, as either an effort of nature, and highly dangerous to be interfered with, or, on the artificial production of which, a salutary termination almost exclusively depended. On this account much pains have been taken, many old and new books have been examined, to ascertain how far a diarrhœa and its consequences, (such, let it be particularly attended to, as existed in the preceding cases,) was to be *encouraged, moderated,* or *checked.* Riverius, an author quoted by Burserius, was found to have made this remark on the subject, in the last paragraph but one of his chapter "De Morbis acutis puerperarum."—"In generè autem hoc perpetuò observandum; quò longius puerpera distat à die partus, èo tutius medicamentum purgans posse administrari: et contra. Nam experientia docuit, mulieres purgamentorum suppressione laborantes, si post septimum, vel nonum diem alvi fluxu corripiantur, ut plurimum liberari. *Si vero primis diebus, videlicet secundo, tertio, vel quarto diarrhœa acciderit, ut plurimum interire.*" * The notions of

* Riverii opera, Med. Universa, p. 487.

Riverius

Riverius and his cotemporaries, and of many later writers, "de purgamentorum suppressione," viz. that it acts immediately as a cause of the disease under consideration, and of many others peculiar to the puerperal state, have not been established by the best modern writers on the subject; for, though a suppression of the lochia may, and does at times, precede, and frequently attends, the disease in question, still it has been considered a circumstance of accidental occurrence rather than as necessary to the production or continuance of it. For, in many undoubted cases of genuine puerperal fever, not the least derangement has taken place in this uterine function. The practical remark, therefore, respecting the accession of the diarrhœa is that to which particular attention is requested.

Willis, in his chapter on "fevers of women in child-bed," gives it as his opinion that women in this condition are obnoxious to a putrid, or rather malignant, fever, excited by the contagion of a pestilential air. He found that patients were more likely to recover the later the disease occurred from delivery. He did not observe that in his practice it went off by crisis, still the disease was at its height on the fourth day. He dwells particularly on the "vehement and quick pulse," and of "wonderful distensions about the viscera." Sweats were not observed to be favourable, nor *diarrhœa* or the reappearance of the lochia, unless they relieved the symptoms. At page 637 of his translated works, he again observes, that we are not to expect a crisis, "nor does the disease admit the use of a cathartic remedy."—"That if the belly be costive, let it be gently loosened by the violet suppository, or an emollient clyster. *We must beware of a too strong irritation, because it is known that in child-bed the strength is suddenly cast down with a swooning, by copious purging, even as in a malignant fever.*" He concludes by observing, that, although in some very desperate cases, he gained a little by the use of cordial medicines, still when the use of them was for a while remitted, "the diseased fell headlong into death, with a weak pulse, and a looseness forthwith ensuing." *

It is unnecessary to add to the length of this paper by other parallel quotations. The truth indeed is, that, with the

* Dr. Hulme, in his work, has the following remark; "A diarrhœa coming on at the beginning, if followed by a slower pulse, prognosticates safety. But, if after evacuations by stool, whether procured by nature or art, the pulse should not become slower, it is to be reckoned as one of the most dangerous symptoms."—*Hulme on the Puerperal Fever, p.* 31 *and* 32.

exception of Mr. White's case, above alluded to, the occurrence of diarrhœa, such as has been described in the above cases, has been hardly mentioned by authors on puerperal fever. Mr. Burns, indeed, remarks, that "diarrhœa should not be allowed to continue long, and is always to be restrained, unless it *evidently gives* relief, and the fæces be very fœtid." This work, however, is so common, that a bare reference to it is sufficient."

The diversity of opinion which has prevailed with regard to the nature, &c. of the puerperal fever, has been alluded to. The facts which have come under the notice of the author, have not been numerous enough to give a very firm foundation to a new theory, had one been suggested by them. They have afforded additional support to the opinion he has received from various sources, and made it more probable to his own mind, that the disease primarily is purely inflammatory; that this inflammation may and does differ in its nature, and may be seated exclusively in either of the textures of which the intestinal canal is composed; or it may seize the whole of them. It may, for example, seize the peritoneal coat, exciting excruciating pain, constipation, frequent and hard pulse, and, unless removed by such remedies as are indicated, it shall be resolved by large secretions of pus, into the cavity of the abdomen, and this shall destroy the patient, or gangrene may cut her off, before this takes place. It may seize the mucous coat; first excite the canal to the evacuation of its contents, then to an increased secretion of mucous, and thence increasing, waste the patient by diarrhœa, constituted by discharges similar to those which occurred in the case of Mrs. G., unless remedies check it.

Further, this inflammation may attack the omentum or ovaria, constituting the most dangerous varieties of the disease. The constitutional and local treatment proper in the first, must be actively employed in this, and the diseased actions, into which other organs may fall from sympathy, will be occurrences demanding additional regard. There is not room enough in a work of this kind to speculate on the *nature* of this inflammation, and to inquire if this disease be contagious or not, and the questions are not involved in the subject of this paper. It was deemed proper to advert to the varieties of the disease, for, as it has been universally inculcated by all authors, the diarrhœa which affords relief should never be checked; for it is in truth, in most cases, an effort of nature to cure the disease; nay, if there be any evidence of its being the consequence of irritating causes in the intestinal canal, they should be promptly removed by cathartic medicines.

When

When purgatives are indicated, and they most generally are, they should be resorted to as a substitute for what nature is inadequate to effect, in consequence of the violence of the disease. Always, however, bearing in mind that excessive alvine defluxions are among the dangerous symptoms of this disease; and especially when they do not afford relief; and that when they are uselessly, nay, hurtfully excessive, it is our duty, because it is indicated, to check them.—*New-Eng. Journ.*

For the Medical and Physical Journal.

On the Mode by which Death is produced by Hanging; by MEDICUS.

THE circumstances attending the recent execution of the unfortunate Ashton, may be adverted to as containing an illustration of the mode by which Death is occasioned from Hanging. It has been generally supposed to arise from one of two causes, dislocation of the neck and suffocation; but the former supposition has, I believe, been generally abandoned. That it is not owing to suffocation alone, I presume, from the fact that death occasioned by strangling, however complete the act, is not so speedy as that produced at the ordinary execution *drops.*

The narrative of the case in the newspapers is this:—"The signal was given, and the platform fell: scarcely, however, had the other sufferers dropt, before, to the awe and astonishment of every beholder, Ashton rebounded from the rope, was instantly seen dancing near the ordinary, and clapped his hands and huzzaed. At length the executioner *pushed* him from the place, and he *met his fate in great agony,* and died in strong convulsions."

When the reporter speaks of his having rebounded *after having dropped,* he is evidently mistaken: it is more probable that at the instant of the platform falling, he was jumping towards the ordinary; and I can readily believe he was actually dancing by him while the other sufferers were suspended.

I believe death from hanging, as it is practised in London, to be produced solely by the violent shock inflicted on the spinal marrow at the juncture of the head and neck, as it is produced in the rabbit by the striking of the neck at that part. In the old system of drawing a cart from under the criminal, and in the case of Ashton, who was pushed off the scaffold, this effect would be in a great degree lessened, if not prevented, leaving the suffocation alone as the cause of death. It is to the perpendicular drop, and the immense shock

shock occasioned by it, that the instantaneousness of the death is due.

The slight muscular movements seen in some who are executed by the drop, are no proofs of the continuance of feeling or vitality, but merely the remains of muscular irritability which exists even in parts separated from the body, and which may often be excited in dead bodies by the galvanic action. But these are very different, and not to be compared to the horrid struggles and convulsions which have been witnessed in executions by the old method.

London, Oct. 16, 1814. MEDICUS.

For the Medical and Physical Journal.

Observations on Fractures; and the good Effects of Vesicatories in promoting Union in Cases of Fracture which may not have united naturally. Likewise, an improved Method of removing Enlarged Tonsils, and also of Cupping. By Mr. RICHARD WALKER, of Oxford.

THE principal aim in the management of fractures should be, of course, to leave the limb, after the cure, or union of the bone, as nearly as possible in its natural state, respecting form, &c. this being essential to a due strength in the limb afterwards, as well as for appearance.

Perfection in this point, I well know, is not to be expected in a young surgeon commencing practice, whatever may have been his previous instructions, and observations upon others; and the object of the following observations will be to point out briefly the method of effecting a better cure than I have observed in the management of others.

It may be proper to observe, however, that in certain fractures, viz. such as are called *compound*, or *complicated*, although much may be effected by superior skill in the management of them, yet some degree of deformity, or irregularity, in the limb, it may be impossible to avert. In simple fractures, likewise, if the bone be broken *very obliquely*, some small vestige of the injury may be expected; but in a *transverse fracture*, especially in the leg, not connected with the joint, any vestige whatever of the injury, after the union of the bone, except an incidental thickening at the part, as sometimes happens at first, from a *redundancy of callus*, but which is in time absorbed, may be considered as reflecting disgrace on the surgeon.

I have attended to the reduction and after-treatment of not less than *a thousand fractured limbs*, simple and compound, assisting at most of them, and had the entire care, from beginning

ginning to end, of nearly one-fourth of that number. The ordinary method was, to place them *on the side*, the joint being in a relaxed or bent position throughout the cure. Having observed, under the management of others, as well as my own, that, notwithstanding every possible attention to fractured legs, by this method, it not unfrequently happened, that, in the end, the tibia bowed more or less forward at the part broken, in all future cases, of which I had the entire care, which were many, I uniformly adopted the following method. I placed them at first on the side, the knee-joint being somewhat bent, and when the tension had completely subsided, by the usual discutient means, which, in simple fractures, was in about ten days, I turned them carefully round *on the heel*, the patient, of course, being at the same time turned round carefully, so as to lie directly on the back. The limb was now placed in a fracture-box, the knee being kept in a flexed position, by the adjustment of pillows, &c. with the usual appendages of splints, &c. By this method, I mended the broken legs so well, that I could defy an observer to point out which leg had been broken.

It might appear to be improper to turn the leg after it has been *set* as it is called, but an adept in these matters well knows, that, from the restlessness of the patient, and other causes, the limb requires occasional adjustment for a considerable time after its being first properly reduced, especially if laid on the side. My reason for placing the leg at first on the side, was, because the tension appeared to be less, and sooner subsided, in that position, and no mischief produced by afterwards moving it.* In compound fractures of the leg, I commonly placed them in the fracture-box from the beginning, having constantly found this method of

* Much attention and care is required, of course, in thus altering the position of the limb and body, without the fractured part being in the least disturbed; but, that it may be done with perfect safety at the time, and with eminent future advantage to the patient, I have had the experience of some scores of cases to confirm the truth of. I took the care of the fractured part myself, and by sufficient assistance contrived that the limb and body should be moved together in such perfect unison, that the fractured part remained as unmolested as if it had not been moved.

The coalescence of the ends of a broken bone is progressive, and, whilst the coalescence is going on, *yielding*, especially in the early part of it; hence admitting of adjusting, if required, during the early part of that process of nature.

In very old persons, it may be adviseable *not* to adopt this mode of practice; but to place the limb in the fracture-box at first.

placing the leg essential to the comfort of the patient and welfare of the limb.

It sometimes happens, notwithstanding the utmost attention and skill of the surgeon, that simple fractures do not unite, or coalesce, but remain loose as at first. This circumstance, I think, happens in legs chiefly, and in elderly persons. This is so rare an occurrence, that I do not recollect above six or eight instances of it. After various means tried in vain to effect a union, none succeeded but the dreadful resource of having the bone denuded, and the two ends sawed off. One patient, an elderly man, under this dilemma, was doomed to amputation: I proposed to the surgeon, (after every thing that had been suggested was tried in vain, and amputation had been proposed to the patient,) with a view to excite adhesive inflammation, to try *vesicatories;* this was complied with, and, by a repetition of blisters, applied round the limb, union of the bones was effected, and the man at this time (the circumstance having happened seventeen or eighteen years ago) has two good legs to walk on. There are some instances, as I have witnessed, of the union of the bones being prevented, by the intervention or formation of a membranous substance between the bones; in this case, of course, the operation before-mentioned must be resorted to. The latter cause may be suspected to exist, when, on examining the limb *adroitly,* no grating, or rubbing of the ends of the bones, are perceived.

The application of *vesicatories,* after the manner above-mentioned, has been evidently serviceable since in instances, a few of which have occurred where there was a sluggish disposition in the part, or a tardiness, to unite, particularly in a case of a fracture of the fore-arm, (both bones broken,) which remained as loose or as disunited as at first, after several weeks, which was consolidated by means of repeated vesicatories. It will be understood, of course, that, in all the instances I have alluded to, the persons were free from disease of any kind. The vesicatories were repeated to five or six times, and more in some instances.

In a fracture of the thigh or leg, it is essential to the well-doing of the limb that the body of the patient be kept in the same position exactly, whether on the side or the back, as that on which the limb is laid, any occasional twisting in the body, during the process of the consolidation of the bone, tending to produce a distortion in the limb. This is a circumstance requiring, on the part of the surgeon, constant attention, in consequence of its irksomeness to the patient; and nothing but a strong impression of the necessity of it, in order to obtain a perfect cure, without distortion, can make

the

the patient comply with it. When it becomes necessary for the patient to lie on the side, he should be propped up by pillows, or otherwise, and there should be no inducement, by attendants or visitors, to incline him to the contrary side. Should any temporary motion or alteration in the body be required, the limb itself should be kept steady in its place by a firm pressure of an attendant's hand.

It will be understood, that what I have inculcated respecting the occasional adjustment of fractured limbs, arises from necessity. Unquestionably, the limb after being once *set*, as it is called, should be kept as quiet, or as free from motion, as possible.

In cases, however, where the ends of the bone do not readily coalesce, a gentle motion, or friction of the part, has been found to promote union.

It is essential in fractures of the thigh or leg, especially in the former, that the bed, or rather the mattress, be as near to a plain surface, and as little *yielding*, or free from hollowness, as possible.

In a fractured thigh, *two splints only* should not be trusted to, as is customary with many practitioners; *four* being required to ensure a good limb.

It will, of course, be necessary, that the leg, when placed in the fracture-box, as above mentioned, should be somewhat elevated by pillows, so as to allow of the *bent* or *relaxed position* of the knee, and the ham duly supported, or filled up underneath, provided the surgeon has not the kind of fracture-box, which admits itself of the necessary elevation.

These observations may appear superfluous, or too minute to some persons; I well know, however, that they are *all* essential to the formation or restoration of a good limb; and that a thigh or leg, more or less distorted, after a simple fracture, is no very extraordinary occurrence.

In a fracture of the fore-arm, particular attention is required in the adjustment of the splints, from time to time, to preserve its due form, that is, free from the least twist.

Dislocations.—These cases were very frequent occurrences, especially of the *Humerus*, and, unless neglected for a length of time before application, were easily enough reduced.

The *Dislocation of the Femur*, I consider to be a very rare occurrence, *one only* presenting itself during the whole of my residence in the Infirmary. This case had been, previously to its arrival, represented to me, by a gentleman of the faculty, as a fracture near the hip-joint; I examined it,

found it to be a dislocation, and immediately reduced it. I suspect that the dislocation at the hip-joint has, in some instances, by inexperienced practitioners, been mistaken for a fracture, and the patient, in consequence, remained lame his whole life after.

This is the only instance of dislocation at the hip-joint which I have ever seen; and I apprehend that many a practitioner in extensive practice may have passed his life without meeting with one.

I know of another, indeed, in an elderly person, in whom the dislocation was mistaken for a fracture by an experienced surgeon, long since dead; and another, from credible report, under similar circumstances, both of whom were compelled to use crutches the remainder of their lives.

There are two or more varieties of this accident, viz. one in which the head of the thigh-bone is dislocated forwards and downwards, in which the thigh is *elongated;* and another in which it is dislocated upwards and outward, in which the thigh is *shortened:* hence it *naturally* follows, that, in conjunction with other circumstances, this latter variety is more liable to be mistaken for a *fracture* of the thigh-bone, in which the thigh is *shortened* likewise.

The case which presented itself to me was of the former kind,* and probably the others were of the latter kind.

With respect to very bad cases of *compound fractures,* and *compound dislocations,* no part of surgery, perhaps, requires more judgment as to the possibility of preserving a limb without sacrificing the life of the patient. In a bad *compound fracture of the joint,* it will be generally prudent to decide in the negative. Very much, indeed, depends upon the after-management of the patient, in which it unfortunately happens too frequently that the patient is lost by too great officiousness in the surgeon. Mild treatment of the limb, with quietness, a little appropriate medicine, of which *opium* should be the chief,—and appropriate regimen, judiciously administered, would effect a cure in cases which, for want of such treatment, terminate fatally.

TONSILS ENLARGED.—The method commonly used for removing these is by ligature; for effecting which various modes and various kinds of instruments have been contrived.

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* The person I allude to in this instance is William Bradbury, of the parish of Horsepath, near Oxford; and the person with the *disunited fracture,* who was cured by repeated blisters, is Thomas Izzard, in St. Clement's, viz. the suburbs of Oxford.

Having

Having experienced myself, and noticed in others, considerable difficulty in conveying a ligature round the tonsil, and afterwards making a knot upon it by the most usual method, viz. by means of the instrument well known to every surgeon, and represented in Bell's Surgery, vol. iv. plate 38, fig. 2. The following improvement on that method suggested itself to me. I procured two instruments, each consisting of a stem with a small ring at the end of it of polished iron fixed in a handle of wood; these were threaded with a waxed ligature of convenient size. Holding one of these instruments in each hand, I applied the ring of the instrument in my *left* hand to the base of the tonsil, confining the ligature from slipping, by pressing it against the handle; then, with the instrument in my *right* hand, I conveyed the ligature, by means of the ring, round the tonsil, so as to meet that which I held fixed in my left hand. I next withdrew both the instruments from the two ends of the ligature, and, threading one of the instruments, with both ends of the ligature, I conveyed the ring of the instrument close to the base of the tonsil, an assistant confining it there, whilst I made a single noose of the ligature, hanging without side the mouth, and drew it so as to make the noose pass through the ring of the instrument to the tonsil; then, withdrawing the instrument, I drew the knot sufficiently tight, and afterwards a second knot upon the former. By this method, I succeeded in the first attempt of making the ligature. It is necessary that the ring in each instrument be *sufficiently large, only*, to admit of the first-made noose passing readily through it.

It is sometimes necessary, in order to remove the tonsil, provided the first ligature be not sufficient completely to effect it, as may be sometimes the case when its base is very large or rigid, to renew the ligature after the same manner.

I am induced to consider the above improved method of removing *enlarged tonsils*, which was introduced by me* twelve

FROM THE EDITOR.

* We suggest to our ingenious correspondent, that a pair of curved scissars will effect the removal of a tonsil without the *pain* and delay consequent to the use of the ligature. The Editor has performed the operation of excision in many *varieties* of diseased and enlarged tonsils, and has found it infinitely preferable to the ligature, which in many cases *cannot* be applied; and in some has been attended with alarming erysipelatous inflammation, besides the pain it commonly produces. It is proper to add, that the

twelve or thirteen years ago, as meriting the attention of others, for the following reasons: first, because I had observed a surgeon here, remarkable for his adroitness in this as well as every other operation he took in hand, in one instance, so completely baffled in repeated attempts to make the ligature in the ordinary way, as to be compelled to *give it in;* who, at my suggestion, succeeded instantly by my improved method, and which he ever afterwards pursued, with immediate success; and, secondly, because this method has been adopted generally, and constantly practised here, in preference to any other. The necessity of this operation was a familiar occurrence at the Radcliffe Infirmary.

CUPPING.—To those who do not succeed satisfactorily in this operation by the ordinary method, *with the lamp,* I would recommend the following method, which, after a great many experiments, I found to be the most perfect and easy method of exhausting the glasses of air. Having previously formed a convenient number of bell-shaped or conical pieces of bibulous paper, I dipped these, each immediately previous to using, the twisted handle excepted, into spirit of wine; then lighting it by a candle, I instantly placed it in the glass; then, giving the glass a rotatory motion for a few seconds, applied it over the scarified part, contrived that the lighted paper, the flame of which is extinguished at the instant the external air is excluded, shall not come in contact with, or in any manner incommode, the patient. I do not believe it possible, by any other method, to exhaust the glasses so completely of air, as by the one I have described.

The edge or lip of the cupping-glass should be slightly

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hæmorrhagy which follows the operation is *always* very trifling. In some caustic has been employed with success; but the process is so tedious, that it can only be recommended where the use of the knife or scissars is not permitted.

One of the cases where excision was performed, was that of a young woman dismissed *as an incurable patient from the Infirmary,* and might possibly have been the patient of the surgeon above referred to; the ligature had been applied by passing a needle through the base of the gland, for the purpose of tying it in separate portions; instead of effecting this, it split the tonsil in two parts, and the patient was sent to London for the advice of the Editor. If Mr. Walker will take the pains to consult the records of the Hospital for the year ——, he will probably see the name of Eliz. Acres, the patient in question, who is now known by *one* of the surgeons of that institution to be perfectly recovered, contrary to his expectation.

wetted

wetted with water before using, by means of a wetted cloth or sponge; and care should be taken that the paper be not so loaded with the spirit as to endanger its dropping.

The glass, when circumstances will admit of it, should be applied not vertically but horizontally.

It will be apparent, that the method I have recommended here is merely an improvement, if I may be allowed to call it so, of the method described in the System of Surgery, by Mr. Benjamin Bell, vol. iii. p. 160.

It will be observed, that the few professional improvements, as I consider them, which I now make public, and likewise some others which may follow, were first introduced into use in the Radcliffe Infirmary, and afterwards adopted in private practice many years ago, as will appear by referring to the dates. I lay a stress upon this circumstance, because my peculiar situation in the Infirmary, at that time, rendered such public communication, in my opinion, improper; and, moreover, as I understand, these improvements, originating in myself, have been long since adopted and pursued, but *imperfectly*, in various distant parts.

The improvements I principally allude to, at present, are, "the extraordinary efficacy of a new modification of *carrot poultice*, in sores and ulcers, especially such as are of a highly malignant nature; first introduced into practice here in the year 1795, but not published till the year 1806.* Likewise, on the efficacy of repeated *vesicatories*, in cases of fractures which have remained loose, or have not coalesced;" and "the certain and ready method of removing *enlarged tonsils*," both forming a portion of this paper.

RICHARD WALKER.

Oxford, Oct. 8, 1814.

P. S.—I beg leave to correct an *erratum* which has occurred in my last paper. For the *note* at page 291, read—"The matter of cow-pox being apparently of a milder or less virulent nature than that of small-pox, the circumstance of a local pustule is more likely to happen in the former than in the latter disease."

The latter portion of the above *note* is, by mistake, placed at the latter part of the first paragraph in page 292, to which it bears no relation.

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* A copy of this paper is given at page 140 of the Medical and Physical Journal, for February 1810. The Appendix respecting the supposed efficacy of *turnip poultice, in similar cases*, was introduced without my knowledge.

For the Medical and Physical Journal.

On Small-pox succeeding Vaccination, at Crediton; by Mr. THOMAS HUGO.

THE small-pox has prevailed very generally in this neighbourhood for several months, the first case having occurred about the month of April last. The strong bias which existed in the public opinion against vaccination, in consequence of several reported failures, and the preference which was therefore given to the *variolous* inoculation, was, as usual, the means of a rapid diffusion of its contagion among the poorer inhabitants, most of whom refused the gratuitous offer of vaccination which was made them. The character of the variolous disease, during the summer months, was more than commonly severe; and the number of its victims exceeded, I believe, the usual proportion.

This general prevalence of small-pox has necessarily exposed to a strong infection a large proportion of those who had been previously vaccinated, and has put the security afforded by vaccination to a severer test than at any other time since its introduction into this neighbourhood. I regret to state, that its security against the variolous contagion has been found *here* to be less complete than I was induced to expect, not only from a consideration of the concurrent public testimony in its favour, but also from the unequivocal proofs I had myself so frequently witnessed in support of the same opinion.

As soon as the variolous infection had extended in the town, instances of small-pox began to occur among persons who had been vaccinated. These, it was at first considered, were occasional deviations only, from which the small-pox itself is not exempt; or that it might have happened in cases where the vaccine infection had been confined merely to the inoculated part, especially as, before this time, I had not observed the occurrence of small-pox in a single case where the *test* of a second vaccination had satisfactorily proved a constitutional affection. The cases of failure became, however, at length, so numerous and decisive, that they could not fail to excite alarm, and to engage the serious attention of the medical practitioners.

TWENTY-FIVE persons, who, from the regular progress of the vaccine vesicles, were considered as secure against the small-pox, have casually received the variolous infection, during the last six months. I allude to those cases only which have been attended by medical practitioners, and where the evidence was considered, in all respects, as conclusive.

Many

Many others occurred which were thought doubtful, and some were reported by persons not of the medical profession, and therefore not entitled to implicit credit. Several vaccinated children also, on exposure to the variolous contagion, though it was succeeded by *no eruption*, were as much indisposed, and with exactly the same symptoms, as those were who had a decided eruption of small-pox.

With the exception of two cases, all the above were persons who had been vaccinated upwards of six years. The *most* numerous eruption was in some of those where the longest period had elapsed since vaccination; but it can scarcely be supposed to depend *wholly* on this circumstance, since many of the first vaccinated are found to be still secure. And, *in general*, the number of the eruption, and the severity of the previous symptoms, were as great in the later as in the earlier cases.

In few instances did the number of the eruption bear any proportion to the severity of the eruptive fever. The fever in its attack and progress was commonly violent. The heat was excessive, the pulse very quick, universal languor, pain in the head and loins, frequent vomiting, occasional delirium in the night, and sometimes convulsions. These symptoms, after having occasioned considerable alarm for three or four days, were succeeded by a distinct and mild eruption, which dissipated all apprehension of danger. In some cases, where the eruption was numerous, it suppurated as usual, but it was more commonly hard and tubercular, with little inflammation, and the suppuration very imperfect, the patient almost always passing through this stage of the disorder with scarcely any indisposition.

In many families, consisting of several children, who were considered as having regularly passed through the vaccine disease, it has happened that one or two only were susceptible of the small-pox; but in one instance, *four* children out of five in the same family, who had been vaccinated at different times and by different practitioners, successively had the variolous fever and eruption.

To obviate the possibility of doubt that the disorder I have described was really variolous, I inoculated with matter taken from some of the pustules, and produced the genuine small-pox. I have also witnessed a case of *confluent* small-pox, where the infection was undoubtedly derived from a person who had the disease after vaccination.

The above facts may, I presume, be regarded as satisfactory evidence that in a variety of instances, vaccination affords a partial security only against the contagion of the small-pox. What the proportion of these cases is to the total

total number of persons vaccinated, it is difficult to ascertain, but, from the number which have occurred here, in the space of six months, it is evidently larger than might have been expected. I believe that vaccination has no where been practised with more scrupulous attention to the characteric appearance of the vesicle; and I have in no case which had been entrusted to my own care, neglected to ascertain the constitutional affection, by the test of a second vaccination. It is impossible, I conceive, therefore, to explain these unsuccessful cases on the supposition that the preceding vaccination had been spurious and irregular. Future observation and experience may possibly explain on what circumstance this uncertainty depends.

That the small-pox, during the late epidemic, has been particularly severe and virulent, I have before noticed. Probably the milder cases of cow-pox may not have excited sufficient action in the system to withstand wholly so active and concentrated a contagion. In two instances, even the small-pox itself afforded no security. In the one, the person had been inoculated thirty years before: it was recollected that the febrile symptoms ran high, and that he had an universal rash, which was considered as variolous, and the marks of the inoculation on both the arms are still very large, but the extent of the eruption is not remembered. This person, though he had since been frequently exposed to the infection of the small-pox, received at this time the contagion, and had a very full eruption. In the other case, the person was inoculated about eight years since, and had then many eruptions, yet he had now the disease confluently. In both these instances, the secondary fever appeared to have been considerably restrained by the previous disease.

Notwithstanding vaccination has afforded in so many instances an imperfect security only against the variolous contagion, still its credit continues undiminished as a security against the *danger* of the small-pox. In those cases where the fever was most severe, all apprehension of danger ceased on the appearance of the eruption; and, amidst the mortality of the small-pox, the vaccinated persons, if infected, were secure. This circumstance naturally diminished the alarm which was at first felt, and those who had passed the vaccine disease, were therefore not very solicitous to be inoculated with variolous matter. The appearances, however, produced by inoculation were similar to those occasioned by the casual infection; a great majority were wholly secure; in some it excited fever, and often a rash evidently variolous, but without the pustular eruption; and, in a few instances, a

small and imperfect eruption succeeded, which partially suppurated.

This constant effect of vaccination, in producing a mild and distinct small-pox, gained it many proselytes among the poorer inhabitants, who frequently requested their children might be vaccinated, not with the view of preventing the small-pox altogether, but for the purpose of depriving it of its danger; and this, it must be acknowledged, is not an incorrect idea of the subject.

In the cases which have occasioned the preceding observations, nothing was remarked in the appearance of the vesicles on the part inoculated which could lead to a suspicion of their insufficiency; nor does it appear that the *manner* of vaccinating was uniform, some practitioners having trusted to *one* puncture, whilst others employed *two*, either at the same time, or by instituting the second, by way of test, a few days afterwards. It is probable that the vaccination afforded, even in these instances, a temporary security. It is seldom practised in the country except during the prevalence of the small-pox, and there has been no instance of small-pox succeeding vaccination, even though surrounded by the disease, till after the lapse of some time, which probably varies according to the peculiar constitution of the person, and the strength of the contagion.

The foregoing remarks are made solely with the view of exciting the attention of the profession in similar cases, to detect, if possible, the particular circumstances on which this partial security depends. The blessing which it is hoped will result from vaccination, the annihilation of the small-pox, must, in a great measure, rest on it. With all its present imperfections, it must still be allowed that its powers, and indeed its advantages, are great; and humanity can scarcely be better employed than in endeavouring to render those advantages more general, and to realize the expectations which were originally formed of it.

Crediton; Oct. 25, 1814. THOMAS HUGO.

For the Medical and Physical Journal.

Observations on the Treatment of Scarlatina Anginosa at the Asylum for Female Orphans, Westminster, and at the Friend's Boarding School at Ackworth, Yorkshire; by SAMUEL FOTHERGILL, M.D.

THE history of Scarlatina Anginosa has been so often and so well detailed, that little remains for future writers to add. It is also generally admitted that the varieties of the

disease are derived from one common origin; that persons exposed to the same source and form of contagion shall have the disease variously; in some it may appear as scarlatina, without any affection of the throat; in others the tonsils shall be inflamed, or even ulcerated; and in some the most malignant symptoms may occur. These facts are best elucidated by the appearance of the disease in large schools, or other institutions, where all the varieties of the disorder can readily be traced.

In some cases it is not difficult to assign, as a probable cause for any peculiar severity or malignancy of the complaint, a particularly gross habit in the patient attacked, a constitution affected by previous illness, irregular and improper diet, and other causes which the physician deems adequate to account for a contagious disease like scarlatina proving unusually severe. But in many instances the fever occurs in different forms without any thing sufficiently prominent in the habit of the patient to account for the degree of intensity, whether small or great, which it assumes. Sydenham, indeed, seems to accuse the physician of sometimes being accessory, by the activity of his practice, to the fatality of the disease. Those practitioners who still pursue what is called the cordial plan of treatment, either are ignorant of what that great physician wrote, or they must call in question, what is least to be doubted, his fidelity and accuracy. His remarks are not inapplicable in the present age: "Si plus negotii ægris facessamus, vel lectulis continenter incarcerando, vel cardiacis aliisque supervacaneis nimis docte, et (ut vulgo videtur) secundum artem supra modum ingestis, morbus statim intenditur, et æger non raro nulla alia de causa, quam *nimia medici diligentia*, ad plures migrat."*

Where the disease is disposed to proceed favourably, this injudicious interference of the physician is truly lamentable. It is equally lamentable when he becomes alarmed the instant that the throat appears ulcerated, and the tongue furred; and still more so if he imagines that these symptoms indicate the necessity of resorting to bark, wine, and other warm stimulating medicaments. When such symptoms have occurred early in the complaint, I have rarely seen any benefit arise from the use of bark or wine, either separate or combined. We are too apt, if a patient struggles through a dangerous disorder, to attribute his recovery to our medicines. Some years ago, I gave wine and bark in severe cases of scarlatina anginosa, but I seldom, upon the most attentive

* Sydenham Opera, 8vo. p. 261.

watching,

watching, could perceive any good effect result from such treatment, and have since altogether abandoned it, until the fever is removed, when occasionally it may be serviceable.

In the months of September and October last, about fifty-five children, at the Asylum for Female Orphans, of various ages, from ten years to fifteen, with two adults, were affected with scarlet fever and sore-throat. In some of them the throat was very slightly affected; in others it was ulcerated early in the complaint. Although most of the cases were slight, in a few of the children, especially those whose throats were ulcerated, the fever was considerable. The tongue coated with a thick dark-coloured fur, and a great prostration of strength indicated the serious, if not malignant, character of the disease.

The treatment pursued was extremely simple: the instant a child was observed to droop, and appear sickly, she was removed from the school to a part of the establishment appropriated as an infirmary, where great care was observed to ventilate the chambers. A purgative was administered and repeated as circumstances indicated. In most of the cases it consisted of calomel and rhubarb, in doses adapted to the age of the patients; in slight cases, sulphate of magnesia was given; and, in those of a severe form, to the calomel and rhubarb were added small doses of antimonial powder. Infusion of roses acidulated, was ordered when the opening medicines were not operating. The whole surface of the body, when hot, was well sponged with cold water. In some of the cases acid gargles were used. Under this treatment, which was strictly enjoined by the attending apothecary, Mr. Heaume, and faithfully observed by the nurse, I observed, on my occasional visits, the children proceed uniformly well. Neither wine, bark, or cordials of any description, were given till after the fever had entirely ceased; and the whole of the patients recovered without any unpleasant secondary consequences so frequently attendant on the disease.

Upon looking into Dr. Willan's great work on Cutaneous Diseases, in which scarlatina occupies a large space, I was rather surprised at the following paragraph on the effect of purgatives in this disease. "Purgatives (he remarks) have nearly the same debilitating effect as blood-letting. They are, indeed, very seldom necessary; for though a few patients may, on the first day, be affected with bilious vomiting and diarrhœa, the state of the bowels is more uniform than in other febrile complaints. It has also been remarked that no hardness or tension of the abdomen occurs at an early period of the disease." I certainly have never witnessed the debi-

litating effect from purgatives, and should much doubt Dr. Willan himself having experienced it, especially when in a note to the passage just quoted, he informs us that a small dose, as two or three grains, of calomel is very useful; to which, on the first attack of the disease, he usually added an equal portion of antimonial powder.

Dr. Willan has displayed much erudition upon the subject of scarlet fever, but the practice recommended by the different authors whom he quotes, is so various and opposite, that perhaps he would have conferred more benefit on the profession if he had confined himself to the result of his own observation, or at least have pronounced decidedly upon the merits of the several modes of treatment recommended. Amid the doubts of cautious, and the errors of bold practitioners, surrounded by conflicting opinions whenever he consults books, till he has attained experience of his own, it is very difficult for the young practitioner to decide; but he may on most occasions, whatever practice he pursues, find authority to shelter him. Thus, in scarlatina anginosa, without taking the trouble to consult any other works than that of Dr. Willan, we may find authority for bleeding and for not bleeding; for giving emetics and purgatives, or for omitting them; for giving acids or alkalies, saline medicines, or tonics; for using cold or warm affusion; in short, every remedy is advocated.

Dr. Willan seems to quote with approbation the treatment pursued by Dr. Binns, at Ackworth School, where, in the space of four months, 171 individuals were affected with the complaint, of which the following table gives the result:—

	Affected with the Disease.	*Died.*
Boys	105	5
Girls	49	2
Men	8	0
Women	9	0
	171	7—nearly 1 in 24.

Dr. Binns plan was to give an emetic in the beginning, and small doses of calomel; but he is anxious to inform us that "particular care was taken to support the patient during the operation." The nature of that support may be readily imagined upon reading the following extract. "As soon as the stomach was settled after an emetic, I generally began with the following mixture:

℞. Pulv. Cinchon. Unc. j.
Pulv. Aromat. dr. ij.
Vini Rubri, ℔ij.

When this had been used about *six weeks*, I substituted for

the aromatic powder some canella alba, with one drachm of powdered ginger, which seemed to answer equally well. A child of ten years old would take about three table-spoonfuls of the mixture four, five, or six times, in twenty-four hours. Those who were very ill, took in addition from a pint to a pint and a half, or even more, of red port wine, or of a composition,* which was not unpalatable, which agreed well with the children, and was a considerable saving to the institution. Another remedy was an infusion of red rose-buds in decoction of Peruvian bark, sweetened with extract of liquorice, and acidulated with vitriolic acid: to this was occasionally added, simple or compound tincture of bark. In extreme cases, the extract and compound tincture of bark, with a little ammonia, and sometimes aromatic confection, were made into a mixture with peppermint water, a dose being given every half hour. Such as were but slightly affected, generally drank treacle-beer made with ginger in it, small ale, and sometimes cyder, sage tea acidulated with vitriolic acid, and almost every other drink that was agreeable to them. New milk, and every nutritious food, both animal and vegetable, were allowed as the patients could take them. It is impossible to specify with certainty the quantity of wine taken by individual patients, but, from the general consumption, when a number of bad cases occurred together, it appeared *that children about twelve years of age must have taken each a bottle of red port, and a bottle of raisin wine, in twenty-four hours, for several successive days.* Sometimes strong brandy and water, sometimes brandy unmixed, was given with comfort and advantage to the patient."

Such was the practice pursued at a large boarding school, where every attention was given to the children on the first attack of the disease. Notwithstanding its boasted efficacy, and that the proportion of deaths was only one in twenty-four, considering the tender age of the children, I see no sufficient inducement to give two bottles of wine, besides bark, aromatics, and other stimulants, in the course of twenty-four hours, for several successive days. On the contrary, I consider it a fortunate occurrence that the mortality amongst the children was not more considerable.

Craven-street; SAMUEL FOTHERGILL.
Nov. 13th, 1814.

* This was, red port 2 pints, raisin wine 6 pints, decoction of logwood 1 pint, alum 1 ounce, British brandy 8 table-spoonfuls.

For the Medical and Physical Journal.

Strictures on "Official Papers relating to Operations performed by Mr. Adams for the Cure of Cataract and the Egyptian Ophthalmia," with Remarks; by Mr. C. W. SMERDON, of Clifton, Bristol.

NEARLY ten months have elapsed since the directors of Greenwich Hospital presented to the public the result of Sir W. Adams's successful operations on the eyes of the blind pensioners, as drawn up by himself, and the medical officers of that great national institution. Every encouragement ought certainly to be given to those who increase the comforts of the veteran defenders of our country, and surely it is no small consideration to restore to thirty of these men the blessing of sight. Had he solely grounded his claim to fame and honour on this simple fact, of which the directors were fully competent to judge, they could have had no cause to complain of his subsequent conduct; but he accompanied the exhibition of his patients with a letter, wherein he has made use of assertions as to his mode of cure, which, for the honour of his profession, and to avoid the stigma of empiricism, he was bound to explain his practice, not indeed to the directors of Greenwich Hospital, but to the medical public, who alone can be competent judges of their merits or defects.

This letter, together with its satellite, published as they were by such high authority, have been widely disseminated among the public at large; and, as the knight has therein asserted, that his mode of operating totally differs from that practised by the most eminent oculists in London, which might be construed into an assumption of superiority, so he has contrived to throw into his scale a considerable share of popularity, to which indeed he would be entitled, were his modes of operating found by his competitors to be what he wishes them to be considered.

It is, I think, quite impossible for a medical person to read those Official Papers, as they are called, without generating ideas not quite so favourable of their authors as they in reality may deserve. The different operations on the eye are dexterously glanced over in such a manner as to throw on them an obscure light, just sufficient to render darkness visible, and to make obscurity still more obscure. In the title-page the cure of the Egyptian ophthalmia is coupled with that of the cataract, which, singular to say, (as I shall presently endeavour to prove) is founded in error: this, however, does not appear to have originated with the knight, but

but from the following paragraph, which I have copied from the letter of the medical officers of Greenwich Hospital.

"In addition to the gratifying contents of the second report, we think it our duty to state, for the information of the board, that Mr. Adams has discovered a mode of curing the Egyptian ophthalmia, which has been successfully practised upon several of the pensioners, some of whom had been blind for three or four years, and given up as incurable by the most eminent oculists then in London. The communication that this destructive and hitherto intractable disease admits of cure, we conceive will be gladly received by the board, and the promulgation by Mr. Adams of this important discovery be considered as a great national desideratum."

It is only necessary to advert to the nature of the disease in question to show, that the fact must be otherwise than what is stated in this quotation: it is preposterous to suppose that the Egyptian ophthalmia could retain its original character for the space of three years (or even three days) without wearing out the vitality of the organ which it attacks, and then we should have no longer the Egyptian ophthalmia to contend with, but its destructive effects, and no doubt it is these which are alluded to in the above paragraph.

Independently of any peculiarity which may or may not exist in the soil or climate of Egypt, the Egyptian ophthalmia is clearly of the inflammatory kind, differing only in degree from the common acute ophthalmia of this country, and in the sudden violence of its attack; and hence it is that so many of our soldiers irrecoverably lost their sight, almost as soon as cognizance was taken of the disease.

The anatomical structure of the eye readily shows why this dreadful malady, when not decidedly mitigated in a very short time, should make such extensive ravages: the vessels of that part of the conjunctiva which lines the opake cornea are imbedded in a loose reticular membrane, which allows of their dilatation, as well as accommodating themselves to sudden distension when blood is driven into the eye with impetuosity, by the action of inflammation; the transparent cornea, on the contrary, has not such a structure, for it is evident that a loose cellular membrane interposed between the laminæ of this tunic, would prevent the passage of the rays of light through it; here then the conjunctiva, together with its vessels, (which are continuous with those just mentioned,) are firmly bound down to the transparent cornea, and consequently are not provided with the same resources against pressure from a column of blood; hence, when this fluid is suddenly and with impetuosity propelled into the eye, the vessels of the albuginea become turgid with blood, whilst

whilst their continuations which pass over the cornea, not admitting of a sudden dilitation, sustain a very considerable degree of pressure and are violently stretched, not in their diameter but lengthways; if decided relief be not now given, the cornea very soon loses its vitality, it bursts, the humours of the eye are discharged, and eventually the loss of substance in the tunic, (which, being proportionable to the previous pressure, is extensive in this disease,) is renewed with opake lymph that never becomes vascular, and thus the eye, as the organ of sight, is irrecoverably lost.

Another less hopeless effect of the Egyptian ophthalmia, is a permanent state of chemosis, with vascular cornea, with or without opacity from extravasated lymph; this sort of case admits of considerable relief, as every person who has attended any of the eye institutions of the metropolis must have witnessed; here the violent excitement of the disease has produced an atony in the vessels of the eye, and particularly those of the conjunctiva, and the rational mode of cure, founded on the true principles of surgery, is first to destroy the vascularity of the cornea, by cutting through the diseased conjunctiva around the albuginea; and, secondly, with the combined view of contracting the vessels, of rousing the action of the absorbents, and of stimulating the entire eye, to apply to the organ powerful stimulants.

I trust I shall not be accused of judging rashly if I conclude that this is the sort of case, in the cure of which Mr. Adams's skill has been so remarkably conspicuous; nor will I insult the understanding of those gentlemen who wrote the paragraph in question, by supposing that they would designate such a disease the Egyptian ophthalmia; or that they are prepared to assert, that a violent inflammation of the eye, or of any organ of the body, could, for the space of three years, preserve its original character; as well might they affirm that a case of hydrothorax, supervening on acute inflammation of the chest, is still a case of pleuritis: but what is the inference which the public may have drawn from it? They have heard of and dreaded the Egyptian ophthalmia; they have been told that it has destroyed the eyes of hundreds of our brave soldiers, and, what more nearly concerns them, that the troops on their return to this country brought hither the disease, where the contagion has ever since been kept up. All this will naturally crowd upon their recollection, when, on reading those official papers, they find that Sir William Adams has discovered a mode of curing that dreadful disease; and no doubt they will cordially agree with the medical officers of Greenwich Hospital, that the discovery is a great national desideratum.

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The statement of the cases simply as it stands is conclusive on the merits of Sir William as an operator, and his success; but he claims for himself the merit of a new invention, and the operation of extraction is performed by him by a process totally different from the usual mode.

It must be evident to every one who has read his book, that he has designedly veiled it over with an air of pompous obscurity, whilst he excites the curiosity of the faculty even to wonder, by what rout he contrives to extract the diseased lens.

It should be recollected, that those operations on the larger members of the body, which modern surgeons perform so differently from their predecessors, are altered principally with the intention of simplifying the after-treatment, and counteracting the effects of the constitutional disease, which is always excited by the healing of large wounds. Amputation has undergone very considerable improvement, but has this rendered the operation more simple? Is it a method of taking away the useless limb with greater facility than before? or does it lessen the agony of the patient? All these interrogations must be answered in the negative, because the very reverse is the fact; for, if they were the desiderata of the operation, the old method of cutting directly down upon the bone, by a few sweeps of the knife, could not be improved upon. In this respect the operations on the eye, when the object is the extraction of a cataract, must always very materially differ; here the desideratum, to which all our improvements must principally be directed, is the extraction of the diseased lens, that is, the extirpation of the existing evil, with the least possible injury to the eye; and not with the view of counteracting the effects of the operation, or lessening the extent of the artificial wound; these considerations, joined with the well-known fact, that the diseased lens can only be brought away with safety by one route, will readily account for the generally-received opinion, that extraction was not susceptible of any farther improvement, independent of the superiority which considerable manual dexterity gives to its possessor. In short, the operation may be begun under the most favourable circumstances, the necessary flap in the cornea may be dexterously made, the crystalline capsule may be torn and the lens dislocated, and still, just at the moment as the operation is about to terminate, the iris, as well as the entire eye, may become irritable, and so contract upon the dislocated lens as to render its escape, without the interference of art, impracticable. Under these circumstances the operator commonly makes pressure on the eye-ball, which,

if not done with the greatest circumspection, breaks down the cells of the vitreous humour, and thus forces out a portion of their contents; whilst the cataract sinks from his view, and either the eye is lost, or the operation fails for the present.

These being my sentiments on this operation, I felt much interest to know by what new process a cataract could be extracted, so as to differ from the usual mode of operating; nor could I doubt that whilst the knight claimed for himself a decided superiority to other oculists, he would have shewn that he possessed the candour for which medical men are so deservedly eminent, by laying open to the profession this new process.

The honour of introducing into general practice the operation by solution, is justly due to Mr. Saunders; and I will defy any man to bring about this curative process, and abandon that gentleman's mode of operating. Can it be admitted, because Sir William cuts up the diseased lens more than Mr. Saunders did, and thus, by being enabled to push considerable fragments into the anterior chamber, he exposes them more immediately to the solvent power of the aqueous humour? Nay, is it not still the operation of Mr. Saunders which he performs? I will boldly answer in the affirmative; both have precisely the same object in view, to destroy the vitality of the diseased lens, and to place it in such a situation, as to give to the aqueous humour an opportunity of acting upon it as a solvent. The only difference, which I can discover, between these gentlemen's modes of operation, amounts to this: Sir William does more at one time than Mr. Saunders thought it necessary to do.

Before I conclude this paper, (although it has already far exceeded the limits which I first intended,) I will venture to say a few words on what this new mode of extraction may probably be founded. Sir William, in one of the paragraphs of his letter, says, "I have ascertained a fact of great practical importance, which will in a great degree explain the general bad success of extraction as it is usually performed, namely, that the vitreous humour was in a state of dissolution nearly in one-half of the eyes on which I operated: this is a diseased change which can rarely be perceived before the performance of the operation, and which authors agree must occasion a total destruction of the eye whenever the cataract is extracted in the usual manner. In these cases I performed an operation different from any of the former."

It would be preposterous to place a literal construction on this quotation; the knight, it would then appear, performs an operation different to any he has mentioned, (which are

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by extraction and solution,) because a diseased change has taken place in the eye, *but which change, singular to say, eludes discovery until the operation is performed.*

C. W. SMERDON,
Member of the College of Surgeons.

Clifton, Bristol; Oct. 29, 1814.

For the Medical and Physical Journal.

Additional Cases illustrating the Modus Operandi of Colchicum in the Cure of Gout; by Mr. WANT.

THE following cases are an important addition to those already published, in illustration of the fact that the purgative quality of the Colchicum is not essential to its curative efficiency. It will be remarked, that in the first of them the paroxysm of gout was almost immediately removed by it, *and that the strongest purgatives had been previously administered without effect.*

I am thankful to Dr. Sutton for having exerted my attention to the utility of recording these cases, which, in all probability, I should not have thought worthy of publication, had not doubts been started respecting the modus operandi of the remedy. The accuracy of the statements may be relied on, if the patients themselves are worthy of belief, as they are drawn up nearly in their own words.

On Saturday, the 19th of this month, about two o'clock, I was sent for to Mr. Whitehead, printer, in Whitefriars, who was then labouring under a severe attack of gout in his right hand and elbow, both of which were swollen, inflamed, and excruciatingly painful. It was then beginning in the left finger. I had not quitted him an hour, before it attacked him with great violence in the left hand, both knees, and left foot, which seemed to him to be dislocated. The symptoms rapidly increased in severity until five o'clock, when he could not stand or put his foot to the ground; and, although a robust man, fainted from the violence of the pain. At half past six or seven, he took two drams of the tincture: he then lay on a sofa; and in the course of an hour was so far relieved from pain, that, although he could not previously bear the hand last affected in a dependant posture, he was now enabled to reach his crutch, to support it under his arm, and walk with assistance to bed at eleven. At two in the morning, the pain was scarcely perceptible, if any; but he took a second dose of the medicine by mistake. At six he awoke, got out of bed with perfect facility, and had one very trifling motion; about nine had a

second; at half past ten a third; and at twelve a fourth: the purgative operation was very mild, much more so than that of the Epsom salts, nor were the evacuations so watery, or attended with so much griping. He has been much in the habit of taking opium, which, in the dose of two grains, always affects the head the day after its use, but no inconvenience whatever has arisen from the Colchicum. He has not been sick, and his appetite remains unimpaired. The pain subsided long before the evacuations took place.

The history of the case, previous to my attendance, is as follows. He had been many years subject to Gout. The present attack commenced on Monday the 14th, with pain, swelling, and redness in the thumb, and a feeling as if it were sprained. In the morning of Tuesday he took Epsom salts; in the evening was so ill that he took a purgative draught, with two grains of opium. The medicine operated violently, producing very frequent, copious, and watery, evacuations. Wednesday he was rather easier, took another dose of salts, and in the evening more opium. He steeped his hand in hot water, and smeared it with oil, which seemed to relieve it. Thursday he was rather better, and repeated his salts. Friday afternoon the pain was very violent in his hand, it then flew to the elbow; took two grains and a half of opium; pain increased until I saw him on Saturday, at two o'clock, as above mentioned.

My attendance was desired upon Sophia Sargett, a girl fourteen years of age, residing at No. 7, Abbey-place, Coram-street, on Tuesday, Nov. 29. Five weeks previous to this time she was seized with a diarrhœa, which in three days abated, but violent pains in the legs, feet, and knees, supervened, attended with inflammation and swelling; she was unable to stand or lift the slightest weight. In this state she continued a week without any change, excepting that the pains somewhat abated in violence; the amendment was soon changed for a more severe attack, but in the course of three or four days she was again better. It was always observed, that, as the swelling increased, the acuteness of the pains subsided; on the contrary, when it disappeared the pains returned, and the disease continued alternately better and worse during the whole period of her illness. On Tuesday last the pains were very violent in the legs and ancles; in two or three days the tumefaction appeared, with trifling abatement of pain, as usual; on Friday night the pains recurred in the arm and shoulders; Saturday the hand was affected; Sunday the hip was attacked with great pain and swelling, in which situation she continued until Tuesday morning, when I was desired to see her. Not being

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able to visit her at home, I prescribed the ordinary dose of the remedy, and promised to see her on the following day, certainly not expecting so severe an affection of the hip could be removed in a period so short; on the following morning the girl was brought to me quite well, being able to walk to my house. The *medicine produced no effect on the bowels, but twice occasioned slight sickness.*

Mr. Flynn, carver and gilder, Stacey-street, was affected with gout in one of the feet. The attack was slight, but as the symptoms were on the increase, he applied for my advice. I prescribed two drams of the tincture, which was taken at ten o'clock in the morning: before five in the evening the pain was entirely removed; at nine, *no evacuation or disturbance had been created by the medicine.* I have since found, that about twelve, the patient having taken a hearty supper, sickness arose, and the bowels were slightly relaxed; but this was at least seven hours *after* the disease was removed.

JOHN WANT,
Surgeon to the Northern Dispensary.

North Crescent, Nov. 24, 1814.

For the Medical and Physical Journal.

Cases illustrating the Operation of the Eau Medicinale; from by Dr. JONES.*

THE cases of Dr. Jones not being drawn up in subservience to any particular theory, afford a most unsuspected testimony of the manner in which the French remedy removes the paroxysm of Gout. I have thought it useful to extract the material facts related by him on this subject, principally with the view of confirming what I have before maintained from my own experience, that *purging* is not essential to the efficacy of that medicine.

The Earl of Essex took half a bottle, Thursday morning, fasting. By four in the afternoon the pain was considerably abated. He took the remaining part of the bottle going to

* This gentleman, to whom the profession is indebted for the first, and we believe only detailed, account of the Eau Medicinale, has just returned from the Continent, and has communicated to Mr. Want some recently-acquired facts respecting this medicine, which will satisfy any remaining doubts that may exist relative to its identity with the Tincture of Colchicum. As we hope to present the public with this interesting document from the pen of Dr. Jones himself, as soon as his avocations will permit, we forbear to enlarge upon the subject.

bed,

bed, passed a comfortable night, and slept well; on Friday he awoke *without* pain. The medicine produced many evacuations that day, but it should be observed they had not taken place until the pain was entirely removed.

The Earl of Carlisle took half a bottle at bed-time; in a few hours felt relief, and in the morning was very free from pain. The medicine operated only as a sudorific, excepting only a slight nausea which it occasioned.

John Sands took a whole bottle; in a few hours was relieved, and slept comfortably; he awoke in the morning without pain. The operation of the medicine was powerful, by stool only. The time of its commencement is not specified.

Mr. Crow had taken forty drops of laudanum, without the slightest alleviation of his pain. The following night, going to bed, took a whole bottle; in a few hours considerably relieved; on awakening was free from pain. *Ten* hours after taking the medicine he had great nausea, followed by vomiting and copious bilious evacuations. As the pain was *quite* gone by on awakening in the morning, the operation on the bowels could not have taken place until after his amendment.

The Baron de Roll took a full dose of the eau medicinale at bed-time. The first part of the night was passed in great torture, but in a few hours he felt relief, and towards morning fell asleep: when he awoke, he was almost free from pain. The operation of the medicine was very trifling, and without the least disturbance. In two subsequent returns of the disease, it was removed in the same easy and expeditious manner, before the very moderate operation on the bowels began.

The Hon. Stewart Wortley took a *full* dose of the medicine at *night*. The pain was *soon* alleviated, and he rested comfortably. In the morning he was most agreeably surprised to find, that, although for some days he could not put his feet to the ground, he could now walk down stairs with ease. After all this relief, effected *before* the morning, nay very early during the night, it was not until the next day that he had considerable nausea, vomiting, and copious evacuations during all that day.

Mrs. ——— took half a bottle at bed-time, while suffering more severely than ever. Its effects were like those of enchantment. In three hours the pain had almost subsided, and she slept soundly. Slight nausea and two trifling evacuations were experienced, certainly not *before* the enchanting dismission of the pain.

Mr. Wood took a *whole* bottle at night. He slept soundly, and in the *morning* found the pain and swelling greatly abated.

Not

Not until he got out of bed, he felt a little sickness, which soon went off, after some moderate evacuations.

Viscount Morpeth took half a bottle at night, and he soon experienced relief. It produced a very copious perspiration, but *neither sickness nor evacuation.*

In Mr. Craufurd, the most violent attack, and which advanced to the greatest length, happened in January last. It came on suddenly in the night, in the most alarming and tremendous way. Agonizing pain seized the right side of the neck, the shoulder, and both hands and wrists. Before the hour of dinner the next day, he was unable to feed himself, or lift his arms off the cushions on which they were placed. At night the gouty swelling and inflammation were already apparent on the right wrist and elbow. Indications of the disease also began to appear in the knees and feet. Every thing, in short, portended a long and terrible fit, if suffered to run through its usual course. At bed-time he therefore took a full dose of the eau medicinale. In the morning the pain was greatly alleviated, and he could bear some motion of the affected limbs. By dinner-time he was able to make use of his hands, and on the third day the symptoms had totally disappeared. The remedy had no other perceptible effect on the stomach and bowels, than to excite a considerable degree of nausea, during the whole of the day after it was taken.

Mr. Harrison took a whole bottle. On *Monday morning*, he took half a bottle of the eau medicinale; in the evening, already felt relief, and took the remaining half. He enjoyed a good night's rest, and awoke on the *Tuesday morning* without pain. The medicine *now* began to operate in a *very gentle* way on the bowels.

Major Rennell. The medicine had no effect whatever on his stomach, and the slightest possible on the bowels. He felt an unusual degree of lassitude on the evening of the days on which he took the medicine, which might be owing to long fasting. It may, perhaps, be worth remarking, that on one of the days, when the inflammation in the hand was nearly gone, the eating of a moderate dinner (without wine) brought back the swelling and inflammation for some hours. It may be added, that on the first night he had the sweetest sleep that he had enjoyed for a length of time.

Sir Joseph Banks took half a bottle. The effect of it during the night was a gradual alleviation of pain, the gout first quitting the hand entirely, then the left shoulder, then the elbow, and so on. The next day the pulse was 62, and natural, the gout giving way in every joint. *Forty-eight* hours after the first dose, the remaining part of the bottle

bottle was administered, and in the *course* of the next twelve hours, the medicine began to operate, and procured five evacuations. Until this time the medicine had no perceptible effect. In a fortnight afterwards, Sir Joseph was seized with a severe gouty lumbago. He had again recourse to half a bottle of the eau medicinale at bed-time, and before morning the pain and every other symptom were entirely removed. No mention is made of evacuation from the bowels, and, as the *same* dose of the medicine administered before was insufficient to produce this effect, setting aside Sir Joseph's positive declaration to me, it may be reasonably concluded that no such action did take place. At the first administration of the medicine, half a bottle had in some measure subdued the disease, which is described as then giving way in every joint, *without* purging, nor did the latter take place until a second dose was given *forty-eight* hours after the former, and then it required *twelve* hours to produce five evacuations—no great proof of the strong purgative quality of the medicine, and least of all of the necessity of that action to secure its curative effects.

Viscount Dillon took a *whole* bottle at night. The first effect was a profuse perspiration; in twelve hours was quite free from pain. It operated four times during the day *very moderately*, and without nausea and uneasiness. *A whole bottle operated very* moderately during the *day*, the medicine having been taken *over night*, and the pain removed within twelve hours, of course by the morning.

J. WANT.

COLLECTANEA MEDICA.

On the Difference of Opinion concerning an Insect as the Cause of the Itch. From Dr. Adams's Remarks on Dr. Bateman's Synopsis.

I WAS much pleased to see the attention paid in the Synopsis to names and distinctions among the vulgar, p. 67 and 204, notes. This is also remarked in the text, under the article Itch, in which the vulgar names are neatly Latinized. On this occasion, I wish the author had availed himself of information from the same sources from which he derived his names. Few of the Irish labourers who apply for relief at the Carey-street Dispensary, would be found ignorant of the *flesh-worm*, of the difference between the disease it excites, and the *itch;* and even of the different manner in which each may be cured. The experiments made in Madeira, and confirmed in Ireland, have lately been repeated at Paris; but

whether the vulgar were consulted, does not appear. In the Synopsis, we are referred to Abinzoar of the 12th, and others of the 15th and 16th centuries. Without questioning the accuracy of either, let me remark, that Ambrose Paré, about the last date, gives a very accurate account of these insects, and says, the patient may be cured by extracting them; after which he advises stavesacre, aloes, or salt, to be rubbed on the parts. Sauvages and Plenck both advise extracting the insect. Can this be the disease in which Swammerdam, Canton, Baker, Heberden, and Hunter, never could discover an insect with the best microscopes?

It must be admitted, that since philosophers interfered in this question, it has been involved in much obscurity. Bonomo took half his lesson from the galley-slaves; and of his crude materials, Dr. Mead published a mutilated account in the Philosophical Transactions. From that time, philosophers and physicians have been much puzzled; some having seen the insect, which never could be detected by others, who searched for it with the best microscopes, in the most marked cases of itch. Sauvages, who distinguishes the two diseases in his octavo edition, confounds them in his later quarto edition. Dr. Willan, who was full of candour, was aware of these difficulties, and thought he could reconcile them, by finding that Sennertus, Mercurialis, and some other writers of their date, had described *pruritus* or *prurigo* as the frequent forerunner of scabies. His words are, when persons affected with the above disease neglect washing, "the eruption grows inveterate, and at length, changing its form, often terminates in the itch. Pustules arise among the papulæ, some filled with lymph, others with pus. The acarus scabiei begins to breed in the furrows of the skin, and the disease becomes contagious." This was published before I had given him the history of the disease, and shown him the insect, of which he procured me a drawing by the late Dr. Shaw. Had my friend Willan lived to complete his work, I have no doubt that he would have corrected this passage, and done justice to the sources of his information, as he never failed to do on other occasions.

In the Synopsis, there are two attempts to reconcile the difficulty. The first is, by approving Sauvages' arrangement, in making a separate species of S. Vermicularis; the other is, "by supposing that the breeding of these acari in a scabious skin, is a rare and casual circumstance, like the individual instance of a minute pulex in prurigo, observed by Dr. Willan; and that the contagious property of scabies exists in the fluid, and not in the transference of insects."

Does the expression "generated in some species of scabies only," mean that scabies is necessary for the generation of such an insect, or that there is a species of itch occasioned by the acarus cyro? The latter seems the meaning of Sauvages; but, were it as Dr. Bateman afterwards expresses himself, "a casual circumstance," it could not be "like the individual instance of pulex mentioned by Dr. Willan." We have then only to inquire, whether they will

breed under the cuticle of a skin free from scabies? and whether the disease may be cured by extracting them? Both these facts have been experimentally ascertained. The conclusion is, that an eruptive disease, independent of the itch, is excited by an insect called in Ireland the flesh worm; in France, the çyron; in Portugal, ouçāō; once well known in England by the name of wheal worm, and still sometimes occurring. That the disease which it excites, from some resemblance, from situation, and from yielding to the same remedies, may be mistaken for itch; but that the insect has never been discovered when searched for in the most marked cases of true itch.

In the Synopsis, we have four varieties of scabies. These four consist of the true itch only, and another disease, which I have called the *herpes pauperum*. This is the Scabies Cachectica of the Synopsis, a term which, if contagion were not attached to the genus, would be unexceptionable. It has been noticed by Sir John Pringle, by Dr. Gillespie, and by many other writers on camp and prison diseases. It occurs in confined nurseries, if change of air is not introduced, but without extending to other parts of the house. I have seen it in two or three misguided youths, who have returned to their parents, after a temporary absence, in the lowest order of society: in these instances, it has never been communicated to any of the family.* I have called the disease Herpes, from its disposition to spread along the skin. This etymology of the word is admitted in the Synopsis (from ἕρπειν *serpere*.) Yet, in the same work, "the appellation is limited to a vesicular disease, which, in most of its forms, passes through a regular course. Such is particularly the case with one "*local* variety," which, we are told, p. 233, "was not noticed by Dr. Willan." It is incidentally mentioned under a different name in Observations on Morbid Poisons, 2d edit. p. 94, and is most minutely described by Mr. Royston, in the Medical and Physical Journal, vol. xxiii. p. 446.

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* See also Epidemics, chap. 1. From the last-mentioned circumstances, I was led to suppose, that the disease is only infectious in that kind of air in which it is generated.

If the reader is unacquainted with these distinctions, and has not leisure or inclination to refer to the arguments by which they are inforced, I must request him to give me credit for them. One illustration, however, occurs from this passage in the Synopsis. "The most ordinary cause of scabies, we are told, p. 196, is contagion."—"It seems, however, to originate in crowded, close, and uncleanly houses."—"When the contagion has been introduced, however, into families where every attention to cleanliness is enforced, it frequently spreads to all the individuals, children and adults," &c. All this is correct, if the genus *Scabies* is to include diseases arising from different causes, and different in their character, and even different in their mode of cure. But, in my opinion, it would be more correct to say, *Itch and Herpes pauperum* are both common in close and uncleanly houses—the former must be introduced into, but the latter may be generated in, such places, and both are communicable in such places. The former, when introduced into a clean family, may be communicated before the parties are aware of it; and will only yield to certain local remedies. The latter is never generated in such families, nor communicable when introduced; and is cutable without the local remedies necessary in the former.

Etymology of the word Scrofula, and Definition of the Disease.

HAVING mentioned the word Scrofula, after professing to avoid all technical expressions, I might perhaps excuse myself, by saying, that the word is sufficiently vernacularized; but unless it were as well understood, this would scarcely be a sufficient apology. The learned may require an etymology: this would be extremely difficult, in a word, the orthography of which is not well ascertained, some spelling it with the *f*, and others with the ph. The former derive the term from *Scrofa*, the Latin word for a sow that has frequently littered. Even here there is a doubt concerning the application of the etymology, some ascribing it to the frequency with which pigs are affected, and others to the multiplication of certain tumours, similar to a large litter of pigs. Most authors say, that it is a disease of the glands of a particular species; yet parts are often said to be affected by it in which none of these glands are discovered, as the bones, the lungs, and membranes of the eyes and nose. It is said to be hereditary, but it is only so in predisposition, always requiring some exciting cause. These causes are all of them such as produce a disposition to local disease, and lessen the restorative powers of the constitution, or of the diseased part. The most general of these is cold. Hence it has been remarked, that among the inhabitants of the colder parts of our island, there are few families who are not scrofulous; but this is only saying, that the exciting cause is constant among them, that therefore no individual of any family can entirely escape, who has the slightest predisposition to it. The truth is, that the inhabitants of warm climates are much more predisposed to scrofula, as is proved by the effect produced on them when exposed to the cause. Negroes in cold climates rarely escape; and the children sent by their parents from the south for education, often suffer the effects of a disease never before seen by the family.

Cold, however, is not the only exciting cause. Poor diet, bad clothing, and all the other attendants of poverty, or privations from any other cause in the most favourable climate, will produce a similar effect, but less aggravated than when increased by the continual operation of cold. The late Dr. Heberden, whom I so often mention, and always with pleasure, speaks of the unwholesomeness of diet or situation as an exciting cause. The inhabitants of Rheims are said to have been very much afflicted with scrofula, when they used no other water but from their wells; and to have been relieved by the introduction of the water of a neighbouring river. Is it not highly probable, that the meliorated condition of the inhabitants which enabled them to afford the expence of such aqueducts, might also, by proving the means of better diet, clothing, and lodging, have contributed to their exemption from scrofula? Every community, as it is poor, is subject to cutaneous and other local diseases, which are ill-conditioned and inveterate, in proportion as the means of relief are less in their power. It is universally admitted in Great Britain, that the inhabitants are more free from these complaints, as they are become richer. But the uncertainty of our climate will always expose those who have a

strong susceptibility, because we never can be sufficiently prepared for changes of temperature, like the inhabitants of more settled, though colder, regions.

Scrofula is very well described by the common expression of bad flesh to heal, so that any one may become scrofulous by a low state of health, induced from any cause; but some constitutions, in every state of health, show a less aptitude for healing wounds than others. If, in these subjects, inflammation is excited in any part, there will be always danger of consequent abscess, and the healing process will be slow. In young subjects, the glands are the most liable to inflammation, probably on account of their increased action at the period of growth, in order to model the form to its various changes. Hence, the glands of the neck, by their exposure to cold, are the most liable to become scrofulous. Though the consequent scars, from their unsightliness, are usually considered as the strongest proofs of a scrofulous constitution, yet, as the causes which induced the inflammation of those glands have ceased, there is no reason to apprehend any subsequent symptoms, without the access of some external cause. White swellings, and a variety of other complaints, are very properly enumerated as scrofulous, yet they more frequently appear in those who have escaped the early symptoms. The terror of scrofula is much increased by its sometimes affecting the lungs; but the most frequent form of consumption, we have already seen, is neither hereditary, nor connected with scrofula. In the same manner, the delicate skin and high complexion are often described as marks of a scrofulous constitution; but the fallacy of this is proved, by the frequency with which the disease attacks emigrants from the southern regions. The high complexion is, in this country, the usual attendant on the family consumption, and marks an irritability very easily affected by external causes; it differs, however, from scrofula, inasmuch as the ulcers rarely become indolent.

On the whole, then, I should define scrofula to be that constitution in which local disease is excited by the slightest causes, and in which the restorative power is the most feeble; admitting that such a constitutional predisposition, like every other, is often hereditary, but that the disease itself may, for the most part, be prevented or cured, by avoiding the exciting cause.—*Dr. Adams on Hereditary Diseases.*

Memoir upon the compound and smooth or simple Eyes of Insects, and on the Manner in which these two Species of Eyes concur in Vision. By M. MARCEL DE SERRES, Professor of the Sciences in the Imperial University.

(*Continued from p.* 403.)

THE tunic of the cornea is generally black in the *coleopteræ*: it is the same in those which want the choroid and the mucous varnish. The colour of this tunic is on the contrary much more variable among the *orthopteræ*, and sometimes one and the same eye presents it of two different shades, as we see in the *locusta lilifolia*; lastly, in certain species the tunic of the cornea presents

stripes

stripes variously coloured, and traced with the greatest regularity. These stripes are parallel in the *grullus lineola:* some are of a blackish brown, and others of a yellowish grey, the clear colour of which dips into that of the rest of the eye. It must be remarked, that frequently these shades are effaced after death, on account of the alterability of the tunic of the cornea. There are even species in which the tunic of the cornea is as it were marbled; then it exhibits various shades in different parts of the eye.

As to the tunic of the smooth or simple eyes, it is seldom black in the *orthopteræ*, and its colours are always uniform in the same eye; although they are much variegated, when we examine a great number of species. The most common colours are white, red, or pale green.

A great number of *hemipteræ* also present the tunic of their cornea of colours pretty much variegated; but its brown or rather black tints are much more common than in the *orthopteræ*. As we find among the latter, several *hemipteræ* present the tunic of the cornea of their smooth eyes, either whitish or of the most agreeable red, as is observed in the common grasshopper. Lastly, it appears to me, that almost all the *hemipteræ* which live in water have the tunic of their cornea completely black; perhaps it is the same with all the *coleopteræ* which have the same way of living.

The *lepidopteræ*, furnished with the finest colours, have also the tunic of the cornea of shades greatly variegated. Nevertheless, among all those which fly at sunset or during the night only, we observe that the tunic of their cornea is generally black. To conclude: the case is the same with several species of diurnal butterflies: for instance, the *papilio podalirius* has the tunic of the cornea completely black; and notwithstanding the sombre hue of this colour, the varnish of the choroid is very thick in this species. In the *papilio atalanta* the tunic of the cornea is of a clear brown; thus the black point resulting from the aperture through which the optic nerve passes, is seen on the outside of the eye. It must be observed, however, that as this circular aperture is formed in this species by vesicular tracheæ, and these tracheæ being a little separated from each other, the black point which is seen generally at the exterior of the eye, seems surrounded by other black points, which present a peculiar form, all having a smaller extent than the central point. In the *papilio cardui*, the tunic of the cornea is of a brilliant green, but much clearer in the lower part of the eye than in the upper, on account of the luminous rays less easily reaching them. This tunic is thin, whereas the varnish of the choroid and the choroid itself are, on the contrary, thick. We also observe externally on the eye the central black point, and several others produced by the same cause with those of the eye of the *papilio atalanta*. Only these blackish points are more irregular in their form than those of the *papilio atalanta*.

The larvæ of the *lepidopteræ* have only smooth eyes situated generally on the sides of the head. They are variable in colour and number. Thus we observe eight in the silkworm, and six only in the caterpillar. The former are black, and the latter transparent.

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In the *neuropteræ*, the tunic of the cornea is also very much varied, and its colours vary much in various species. In the *libellula vulgaris*, the compound eyes exhibit all their upper portion of a reddish brown, and all the lower of a yellowish green. On carefully removing the cornea, it is easily seen that the difference in the two colours is owing to the diversity of colour in the tunic of the cornea. It seems even that this tunic is thicker in the brown part of the eye than in the green. We shall also remark, that the upper facets of the cornea are greater than the lower, which is rather singular. If we remove the cornea, we distinctly perceive the optic nerves passing through the choroid and its varnish, membranes which are easily distinguished from their being of a deep black.

The circular trachea surrounds the retina, and its ramifications pierce with the optic nerves all the other membranes, dispersing themselves *ad infinitum* under the cornea. This disposition is so evident, that we may easily conceive how Swammerdam thought the cornea was formed by the meeting of these tracheæ. In other respects the eye of this *libellula* presents nothing particular, with the exception of the enlargement or great extent of the retina.

I have also dissected the eyes of certain larvæ of *agrion* and *æshna*, but have observed nothing very different. These larvæ seemed to want the circular trachea, the place of which is supplied by an infinity of other tracheæ, which spread in a great number around the optic nerve, which is very broad and thick in these larvæ. I never observed that the eye had any particular conformation in the species which habitually frequent the water; and this remark is important, because the case is very different in the other animals. The form of the cornea also presents differences in the species in the aquatic insects, as well as in those which live habitually in the air.

If the tunic of the cornea presents shades much varied in the *lepidopteræ* and *neuropteræ*, these shades are not less varied in the *hymenopteræ*, in which we sometimes see a grey, a green, a yellow, and even all the shades of black. Certain bees, and particularly the *violaceæ*, present this tunic of the most opaque black. Generally the *hymenopteræ* have their cornea very thick, and it is not difficult to remove it by thin slices. Sometimes this cornea is surrounded by hairs, and rarely do they issue from the cornea itself. In a great number of species, the circular trachea is totally wanting; but its place is always supplied by other and smaller tracheæ which surround the optic nerve, and in general these tracheæ are extremely multiplied.

What has been said with respect to the eyes of the *hymenopteræ* is applicable to those of the *dipteræ*, which have the tunic of the cornea with the most variegated shades. In a certain number of species these shades are very brilliant, and the *tabanus* as well as the *musca* hold a distinguished part in this respect.

Certain species of *syrphus* present, at the exterior of the eye, two semicircular stripes deeper than the general tint. These stripes

are produced as usual by a deeper shade of the tunic of the cornea in this part of the eye; but what renders this disposition remarkable is, that there are numerous hairs precisely in this very part of the compound eye, and which originate from the cornea itself.

The eyes of the *apteræ* are in general of dark colours, and not very large. These insects seem therefore not to be much favoured in respect to the organ of sight, and probably their way of life does not require acute vision.

It is remarkable that the insects which live in water have in general their eyes dim and opaque externally, nearly like those which exist in dark places. Thus the nymphs of the *libellulæ* in passing to the condition of a perfect insect assume brilliant and transparent eyes, whereas previous to their last metamorphosis these eyes were dull and without lustre. This observation has not escaped the sagacity of Reaumur in his History of Insects.

In the descriptions which we have given of the situation and form of the compound and simple eyes of insects, it will be remarked that the former disposition is less subject to vary than the latter. This consideration might have arisen *à priori*, since no form can exhibit differences in any order of animals, without other variations following in the parts which surround those whose disposition changes. The only very remarkable example which we can mention of the variation in the position of the compound eyes, is that of the *diopsis ichneumonea*. This insect exhibits its eyes situated nearly like those of the *mollusci*: thus they are placed at the extremity of a long pedicle, or a kind of contractile tentacular point, but which can at least follow all the motions of the head. We may say, on observing this singular organization, that this insect has its eyes at the extremity of a telescope; but, as we have not seen it alive, nor dissected it, it would be difficult to decide how far this idea is correct.

As to the descriptions which we shall presently give of the relation which exists between the size of the bodies and that of the compound eyes, they prove that the *dipteræ*, the *hymenopteræ*, *lepidopteræ*, and *neuropteræ*, have very large eyes: it even seems that there are few animals equally favoured. As a great number of *coleopteræ* and *hemipteræ* have also very large eyes in comparison to their bodies, we may say that this size is very general in all insects. The two solitary examples of the *phasmæ* and *scolopendræ* ought not to prevent us from concluding, that, of all the animals, insects have the largest eyes in comparison with the size of their bodies.

§ II. *Of the simple or smooth Eyes.* The number of simple eyes is far from being as constant as that of the compound eyes. Certain species present two; others four, six, and eight; but in general we observe three. This number is even pretty constant in families which have at once compound and smooth eyes. We rarely see exceptions to this arrangement; and the *blatta*, as well as certain *acheta*, are perhaps the only kinds which, having compound eyes, have only two simple eyes situated on the upper part

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of the head. When there are three simple eyes, they are always arranged in the form of a triangle, so that there are two lateral, and one in the middle; their situation is also constantly on the summit of the head. Sometimes, however, the simple eyes are arranged two on the summit, and one in the middle of the front of the head. This arrangement holds in the *gryllus*, the *truxalis*, the *acrydium*, the *locusta*, and the *gryllotalpa*.

The *empusa*, which have upon the summit of the head a small triangular elongation, cannot, on account of this organisation, see objects with their eye in the middle.

The general form of the simple eyes is very variable: it seems, however, that in general that of the lateral eyes is elongated and elliptical, whilst that of the middle one is round: there are also many exceptions in this respect, since the *acheta* and the *gryllotalpa* present that in the middle of a very much elongated oval, of which the greatest diameter is transversal.

The smooth or simple eye is formed of an external hard transparent membrane, convex externally, and concave internally. This membrane, enveloping the eye, necessarily determines its form: it is not composed, like that of the compound eyes, of an infinite number of facets, but rather of a membrane of a single piece, and on which no divisions are perceptible. We may consider this first membrane as a cornea, on account of its transparency, a transparency which we observe even at the exterior of the eye, on account of the little colour of the varnish applied on the membranes situated under it.

After having removed the cornea, we find a viscous tunic more or less thick, and of which the colour also undergoes considerable variations. Thus this tunic or varnish presents the most opposite colours: it is almost always black in the *hymenopteræ*, whereas it is whitish in the *orthopteræ*. In the caterpillar, this varnish is frequently black, yellow, or red, and sometimes it is of the most beautiful brilliant green. This viscous tunic has been regarded by Swammerdam as a kind of uvea, although it seems very like the tunic which covers the cornea in compound eyes.

We ought not, however, to decide that the tunic of the cornea of the simple eyes is distinct from the varnish of the choroid. This appears probable notwithstanding, since in certain species the external colour of the simple eyes is not the same with that of the varnish with which the choroid is covered. Thus much is certain, that the cornea of the simple eyes is always coated internally with a kind of varnish, the colour of which appears at the exterior of the eye on account of the transparency of the cornea. The coating surrounds the optic nerve, which proceeds into the concavity of the cornea after having passed through the choroid and its varnish. Swammerdam very properly remarks, that the smooth eyes of insects receive nerves which are furnished to them by the cerebriform ganglion lodged in the head. Lyonnet, whose researches announce much sagacity, has also observed that the simple eyes of the willow caterpillar are composed

posed of a cornea and a choroid traversed by the extremity of the optic nerve.

The optic nerves of the simple eyes issue immediately from the brain when these eyes are removed far enough from each other; but, when, on the contrary, they are close together, as observed in the caterpillar and a great number of larvæ, the optic nerves are only divisions of a larger nerve which issues directly from the brain.

Lyonnet has described this arrangement accurately, and the figure which he gives of it, Plate XVIII. No. 6, is very correct. Then there exists a peculiar membrane in the form of a funnel, to which the six branches of the optic nerve are attached, and this membrane ends at the place where the nerve itself divides into these six branches. We do not know positively, if this arrangement exists in the spiders: we only know that it does not hold in the scorpions. Besides, externally the eyes of the spiders and of the scorpions have the same structure and figure with the simple eyes of insects.

Immediately after the optic nerve and the tunic of the cornea, we observe a peculiar membrane, which we shall consider as a kind of choroid. It exhibits, however, this difference from the choroid of the compound eyes, that it has no varnish so distinct; and finally, its breadth is always greater than the circumference of the cornea itself. This membrane, coloured frequently in red or black, is also sometimes colourless; and lastly, its whiteness is so dull that it is easy to distinguish it from the tracheæ. The thickness of this membrane is great enough to make it resist even a long maceration.

In the species in which the simple eyes are whitish, we see this membrane cloathed with a coating of colours varying with the colours of the tunic which covers the choroid. This arrangement is even very perceptible at the exterior of the eye.

It would seem that this choroid is particularly very thick and white in such species as have their cornea concave and as if sunk. This arrangement must have taken place on account of the divergency undergone by the rays of light in arriving on a concave and transparent surface, their direction even being parallel, a divergency which is such that we may very well conceive that the eye would be too much affected by it, if a black membrane had also absorbed a certain number of luminous rays. A white membrane, sending back on the contrary all the rays which it receives, may augment the excitability of the optic nerve, and thus contribute to render the vision more distinct. Although this species of choroid presents in certain circumstances a very great whiteness, it is nevertheless always easy to distinguish it from the trachcæ, the only vessels with which it can be confounded. For, as little as we are in the habit of seeing the organs of insects, we can easily ascertain the tracheæ from their azure colour; and besides, by dissecting them in water (the most advantageous way of acting in these experiments), we see the

tracheæ rise above the surface of the liquid; and from that moment we can no longer have the smallest doubt, for the tracheæ are the only organs which have so little specific gravity.

This choroid, the membranes of which are close and very thick, seems formed by a cellular texture of very close meshes, over which a heap of tracheæ are distributed. It is therefore underneath the cornea that the optic nerve is situated, which issuing from the anterior faces of the brain proceeds to the middle of the eye. It does not appear that this optic nerve has any swelling at its base, or that a kind of retina is formed analogous to that of the compound eyes. In some species it appears to me that this nerve becomes broader towards its extremity, *i. e.* at the point where it corresponds to the cornea. I shall not, however, assert this positively, for it is possible that this dilatation may depend on the contraction produced by the section of the nerve. As I have not dissected these organs in the living subject, (which ought always to be done for the sake of precision,) I have not been able to verify, whether this dilatation depended on the sensibility of the nervous organ. However the case may be, the optic nerve before reaching the cornea traverses the muscles of the various parts of the head, sometimes enters a trachea, penetrates afterwards through the choroid and its varnish, and afterwards, when surrounded with the tunic of the cornea, corresponds to the internal surface of this membrane, on which it seems to lose itself.

As the cornea of the simple eyes is not, like that of the compound eyes, divided by numerous facets, it has not been necessary that the small nerves should give it a great number of small threads, but only that they should proceed to the point where the divergency of the rays of light should be the least considerable.

The small optic nerves which proceed to the simple eyes issue from the brain. As their position varies in regard to the other parts, they are sometimes the second, third, fourth, or fifth pair of nerves: this depends on their situation with respect to the various organs of the head, a situation which determines by what pair they are furnished. These nerves are directed always towards the simple eyes, being retained in their position either by pneumatic pouches, or by tracheæ, proceeding more or less obliquely according to their position with respect to the brain. They always terminate under the cornea, forming a kind of retina.

It results from this description, that the simple eyes are formed quite differently from the compound eyes. Thus the cornea of the former is all of one piece, whereas in the latter it is formed by the union of a great number of hexagonal facets. The tunic of the cornea does not exhibit any difference in the two kinds of eyes, except perhaps in point of thickness; but the varnish of the choroid is always less distinct in the simple than in the compound eyes. Finally, the choroid is not always black in the simple eyes, whereas it is uniformly in the

the compound. Sometimes this membrane, instead of being black and opaque, is of a peculiar whiteness and lustre. To conclude: this membrane and its tunic are placed in the same way with respect to the other parts in both kinds of eyes, and their uses are also similar. The large circular trachea, which we observe in the compound eyes when they present a choroid, does not seem to exist in the simple eyes. In fact, the tracheæ or pneumatic pouches which belong to them are used in supporting the optic nerve, and perhaps also in forming a part of the choroid in that sort of eye. At least the tracheæ of insects seem to perform the functions of the blood-vessels which are observed on the choroid of the red-blooded animals.—*Phil. Mag.*

CRITICAL ANALYSIS
OF RECENT PUBLICATIONS
IN THE
DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

Facts and Observations relative to the Fever commonly called Puerperal. By John Armstrong, M. D. Member Extraordinary of the Royal Medical Society of Edinburgh, and one of the Physicians to the Sunderland Dispensary.—8vo.; pp. 162; Longman and Co. 1814.

THE subject of this treatise is perhaps the most important that can come before a practitioner. The rapidity with which the disease hastens to its termination, and the fatality of that termination when unassisted by art, are well known, as well as are the symptoms which usually announce puerperal fever. But, although there may not be so much difference of opinion respecting the nature of this disease as the author supposes, and seldom any hesitation in discriminating it from other complaints, considerable difference has prevailed in the treatment, and that amongst practitioners of such judgment and experienced tact, that there is still great room for a work in which the subject may be fairly canvassed, and the question set at rest for ever. We conceive the publication before us, although small and unostentatious, to have materially contributed towards this end, and, as far as our own experience extends, we can unite in opinion with the author in most of the points which he has advanced. We say in most of them, because there are some on which we cannot decide so positively: we have not found it necessary to give purgatives quite to the extent which he would recommend, viz. half a dram of calomel for a dose, &c.; we do not agree with him that there is no difference between puerperal fever and peritonitis; neither do we think that it is always contagious.

The opportunities which Dr. Armstrong has enjoyed of witnessing the disease have been considerable; yet he has not been equally successful in obtaining an examination of the body after death in such cases as terminated fatally. From what he has observed, however, he is decidedly of opinion that the complaint in its origin is local. Can this opinion accord with his conviction that the disease is also contagious? that it can be communicated from one lying-in woman to another, simply by a nurse or accoucheur visiting a sound person in another house, after having attended a patient in puerperal fever?

The complaint from which he has chiefly furnished the present observations, in Sunderland and its neighbourhood, "generally occurred about twenty-four or thirty hours, and seldom later than four days, after delivery. It did not seem to depend upon difficulty of labour, for in most of the women in whom it occurred parturition was remarkably easy, and the placenta was cast off after a proper interval, and without more than usual pain. Nor was the lochial discharge, before the attack, in any way apparently affected. The disease was ushered in by very slight shiverings, or rigors, by oppression at the præcordia, by vomiting, retching, or nausea, and by considerable anxiety of mind. When the shiverings or rigors abated, which were often very short, the skin became universally hot and dry, and the thirst urgent. The tongue was much paler than usual, and appeared as if it had been recently rubbed, or dusted with a very fine whitish powder; in some few instances, however, the tongue was tolerably clean and moist about the edges, and this was more especially the case when vomiting frequently occurred. The matter thrown up consisted of the ingesta, mixed with mucus, and yellow or greenish bile. The pulse was seldom less than 120 in the minute, and rather full, tense, and vibrating, or very small, sharp, or somewhat wiry.

"The countenance at this period assumed an inexpressible anxiety, the lips were pale and parched, and there was a kind of livid stripe under each eye, but the cheeks were flushed with a circumscribed redness, like that which is observed in the true hectic. The respiration soon became hurried, and the patient often sighed heavily, was restless, and turned from one part of the bed to another, or lay upon her back, and constantly moved her head from side to side, or suddenly lifted up her hands, or threw them down again with some force upon the bed-clothes. Commonly a little before, or at the very commencement of the shiverings or rigors, there was in the lower part of the belly more or less pain; occasionally it was very acute, shooting in the direction of Poupart's ligament, and through to the back and loins. In some instances, the pain was deep and obtuse, and more confined to one particular part; but in every case, it was aggravated by pressure in and about the hypogastric region. However limited in its extent at first, it afterwards gradually spread over the surface of the abdomen, which became tender to the touch, tumid, and tense."

The author only noticed in three cases the enlargement of the abdomen mentioned by Dr. John Clarke in his dissertation on the low epidemic of lying-in women; but it occurred frequently in the practice of Mr. Gregson, a surgeon of Sunderland. He also observed in several of the cases substances resembling hard bands or chords, which passed completely across the abdomen, and might be distinctly traced beneath the muscles by moderate pressure of the finger.

"The secretion of the milk was nearly suspended soon after the attack, the breasts became flaccid, and the mother, so lately all solicitude about her child, now seldom inquired after it, and indeed seemed almost insensible to those things which before most deeply interested her feelings. The lochial discharge either disappeared or only issued in small quantity, and was very dark and uncommonly offensive. The urine was scanty and high-coloured, but generally passed without much pain. The bowels were constipated and flatulent, and in two instances something similar to the globus hystericus was observed. Though all the patients were restless in the extreme, seldom obtaining a moment's sleep, yet they never complained of violent pain in the head, but of an uncomfortable aching and lightness there. The eyes, when the fever was at its acmé, seemed rather brighter than natural, and the pupils were slightly dilated. The whole train of symptoms already described may, in a practical view, be called the first stage of the disease—the stage in which alone a fair opportunity is offered to the practitioner of saving the life of the patient.

"This state of febrile excitement, in most of the cases which lately occurred, seldom continued longer than fifty hours, and in some it terminated much sooner. When the disease was not impeded at this period, it passed into what may be termed the second and last stage, which, toward the close, was marked by an exceedingly great prostration of all the vital powers.

"But the first approaches of this fatal stage were most clearly indicated by the rising of the pulse, which then generally ranged from between 140 and 160 in the minute, and was very soft and compressible; it feebly struck the sides of the artery, and gave the idea that the heart was labouring hard to keep up the force of the circulation. About twelve hours before death, the pulse became thready, fluttering, and irregular, and so rapid as not to be correctly numbered.

"For some time after the accession of the second stage, the skin remained at an increased temperature, and dry, but then the patients almost constantly complained of chilliness. The cheeks were alternately flushed and deadly pale, the eyes lost their lustre, the pupils were much dilated, and a kind of dewy perspiration stood upon the face and forehead. The pain gradually and entirely receded from the surface of the abdomen, when it usually happened that dark, slimy, and very fetid stools were discharged from that time onward. The thirst was unceasing, and when any liquid

liquid was offered, the patients hastily seized the vessel, and glutted down its contents, as if they had previously been expiring for want of drink. The tongue for the most part was brown, or rather black and parched, and had apthæ upon it, which even appeared about the edges of it at an early period. In one very bad case, however, the tongue continued clean and moist to the last, but there was an almost perpetual vomiting throughout the second stage, though only a slight nausea occurred in the beginning, and very little vomiting in the rest of the first stage. Indeed vomiting was always more urgent in the last than in the first stage of the disease, and the matter then thrown up very much resembled coffee-grounds, and was offensive to the smell. The teeth and gums were crusted with dark slimy sordes, and the breath was disagreeable, as if it had been tainted with mercury. Throughout the complaint there was a short teazing cough, but this was more especially the case in the last stage, when the respiration grew very short, feeble, and frequent, and the alæ nasi were thrown into perpetual motion.

"Soon after the advancement of the second stage, the patients began to talk incoherently; they frequently made attempts to get out of bed, and occasionally, after having laid still a short time, suddenly started, and spread out their hands, which were then very tremulous, as if to ward something off that was approaching them. About this time, two patients became gradually collected, complained of no pain whatever, looked and spoke cheerfully, and flattered themselves that they would soon be well: this illusion continued till within an hour or two of their departure, rendering them completely insensible to their real situation; and even to friends, though warned by the medical attendant, their death was at last unexpectedly sudden. But in three other unfavourable cases, the light wanderings of the mind which took place at an early period of the second stage, were not succeeded by a state of serenity, but by a low muttering delirium, speedily followed by a stupor, in which the patients lay with their eyes half-closed, and could not be roused from it, but by loud speaking, upon which they started as from a disturbed sleep, uttered some vague and hasty expressions, and then sunk into the same condition as before. A few hours before death, in these cases, some dark scattered petechiæ appeared, and the skin was in that peculiar state which accompanies the last stages of tetanus, and the nervous fever of intoxication; the whole surface felt soft, relaxed, and clammy, and the hand glided almost as smoothly over it as if wet by soap and water. In the above three instances, also slight stertorous breathing occurred near the termination of the disease, and, last of all, general, though not violent, convulsions."

In that part of his work which treats of diagnosis, the author again expresses his belief in the similarity, if not identity, of peritonitis with puerperal fever, and considers it essential only to distinguish puerperal fever from "milk fever, after-pains, inflammation of

of the uterus, and that ephemeral called the weed, to which child-bed women are very liable." Without being "admirers of nosological minuteness," and without allowing our belief in the two diseases being different, to influence our practice, we still assert the difference. The practice would not be essentially different in peripneumonia, pleuritis, or enteritis; yet the author, we doubt not, will willingly admit that there is a difference between those diseases. It is sufficient for us at present to observe that peritonitis attacks males as well as females, and in these it is not confined to those in the puerperal state, neither do we recollect in our own practice, nor in authors, any instance of peritonitis being contagious. This portion of the treatise, as well as the few pages on the prognosis, contains some good practical remarks, which deserve the attention of young practitioners. The observations on "prevention" may also be perused with advantage, even by those who do not believe that the fever "is *always* infectious," for, as Mr. Hey has prudently observed, though we may not be decided that the disease is contagious, it is at least proper to act as if it was.

Upon the treatment, we entirely agree with the author in principle. To consider the first stage of the disease inflammatory, and to attempt to reduce it by active and powerfully depleting remedies, of which the most efficacious are bleeding and purgatives. If these are had recourse to in the commencement of the complaint, they will prove successful. When the contrary is the case, it will generally be found that the remedies have been too long deferred, or have not been applied with a bold and decided hand. The author recommends that the quantity of blood to be drawn from the arm at once should seldom be less than twenty-four or exceed thirty ounces. That a repetition of bleeding should be avoided, but, if indispensible, a smaller quantity, not exceeding twelve ounces, should be taken, after a short interval. The cathartic medicines, which he at the same time directs, are very powerful, as calomel in doses of a scruple and half a dram at the beginning, and repeated occasionally in the course of the disease. This mode of treatment was successfully pursued by five practitioners in Sunderland, who, out of forty-three distinctly-marked cases of puerperal fever, lost only five.

"The thirty-eight successful cases were all treated by copious depletions of one kind or other; and in twenty-nine of them, calomel was exhibited in doses of a scruple or half a dram at the beginning, and occasionally repeated in the course of the distemper. For the most part, it passed so expeditiously along the intestinal canal, that there were very few instances in which ptyalism was excited, and, whenever this was the case, it seemed a favourable circumstance, all the patients, with only one exception, recovering with more than ordinary celerity from the time that the mouth became affected. And further, to illustrate the superior efficacy of large doses of calomel, it may be here remarked, that in none of the

the five cases which proved fatal, more than fourteen grains of calomel were given on the accession of the fever; jalap, sulphate of magnesia, and castor oil, being the cathartics chiefly employed during its progress."

Mr. Gregson, whose name is mentioned before, in addition to this plan, when the patients had been freely bled and purged, prescribed antimonial emetics with decided advantage. Another practitioner, however, Mr. Wolfe, of Chester-le-street, and who has had great experience in puerperal fever, it seems, trusts to purgatives alone, and has been very successful in the cure of the complaint. In a letter addressed to the author, Mr. Wolfe states that, during the last sixteen years, he has always trusted to very copious purging for the cure of puerperal fever, keeping the bowels very open for several days successively; and, in some severe cases, even for two or three weeks before the symptoms of the abdominal inflammation completely subsided. The stools, he observes, are of a peculiar nature, and constitute one of the characteristic marks of the disease: they are of a dark brown colour, resembling coffee-grounds, very copious, of the consistence of thick gruel, and with a fetid smell; it was not till towards the end of the disease, as they were approaching the natural state, that hard scybalæ were frequently discharged, even after a long and active purging had been kept up.

The treatment hitherto has been adapted to the first or inflammatory stage of the disease; when that has passed, and symptoms of a malignant nature, as detailed with great accuracy by our author, succeed, bleeding of course cannot be practised; but throughout the whole course of the disorder, whatever other remedies are employed, purgatives are often indicated, and sometimes are indispensibly necessary. The author, in the worst form of the disease, has also found the strength of the patient better supported by milk and broths, than by wine and cordials, which speedily destroy the patient. It is sometimes necessary to give anodynes.

In an appendix, the author has adduced evidence from other practitioners in favour of his plan of treatment, and has presented us with some interesting cases, in which the efficacy of bleeding and cathartics is abundantly proved. One case, in which the plan had only been partially carried into effect at the commencement of the disorder, is curious, as it evidently demonstrates the ill consequences of half-measures in the treatment of this rapid and destructive malady.

We cannot conclude without strongly recommending Dr. Armstrong's Treatise on Puerperal Fever to the attention of our professional brethren, and hope that he will shortly fulfil his promise of publishing his further practical illustration of fever, having in the tract before us so fully demonstrated his competency to the undertaking.

Pathological

Pathological Researches.—Essay I. On Malformations of the Human Heart: illustrated by numerous Cases, and five Plates, containing fourteen Figures, and preceded by some Observations on the Method of improving the Diagnostic Part of Medicine. By J. R. Farre, M.D. 8vo. pp. 46.

On a former occasion, in reviewing Dr. Farre's first fasciculus on the "*Morbid Anatomy of the Liver*," we had much gratification in stating his claims to professional notice. To industry in collecting materials, he happily unites skill in arranging them, and it is fortunate for the profession that his philosophic conclusions afford indubitable evidence of the correctness of his judgment. His mind, indeed, seems peculiarly adapted to the pursuit in which he has so successfully engaged. If, in all the weighty affairs of life, in religion and politics, in those great questions which immediately involve and influence the present and future well-being of man, the attractive and rapturous power of imagination yields to the sober unadorned exercise of reason, it is especially so in those inquiries which concern his health and physical organization. The philosopher smiles at the hypotheses and conceited opinions which ingenious men hazard on subjects, where, from the difficulty or the mystery of the inquiry, conjecture may be tolerable; but he regards with admiration the slow, yet regular, advance towards perfection which a steady exploration of facts necessarily causes. To say that the anatomy of diseased parts in human structure is yet behind the progress of other branches of the healing art, is a truism, and, as such, we do not expect to hear it denied. But is this owing to any impossibility in the research, or to indolence and incapacity in practitioners? We conceive partly to the latter cause. From what we have seen effected by Morgagni, by Baillie, and by some even of more recent date, in fact by most of the teachers of anatomy, to say nothing of detached communications in the memoirs of societies and periodical publications, the only difficulty that occurs to us, is that of perseverance, cool application, and sound judgment in the practitioner who undertakes the inquiry, with sufficient zeal and adequate leisure to record the facts which he has ascertained. Simple, however, as some individuals may estimate these qualities, they have rarely existed together in persons who have possessed the opportunity and the power of prosecuting the inquiries in which Dr. Farre is now engaged.

The present essay affords a pleasing testimony of the progress of diagnosis, founded on morbid anatomy, within the last thirty years; in fact, the chief utility of this curious science consists in facilitating our accuracy in distinguishing the signs of disease depending on imperfect organization.

The author divides the imperfections of structure of the heart into two species, viz. I. Malformations of the heart, or of its arteries, mingling black with red blood. II. Malformations of

the heart, or of its arteries, only impeding the circulation of the blood.

The varieties of these we shall notice in the order in which the author has arranged them.

"I. 1. *Single Heart.*"—This variety is rare. The author does not give a case of it.

"I. 1. *a. Two Pulmonary Branches from the Aorta.*—E., a full-sized infant, was born at three o'clock in the afternoon, March 30th, 1807. For the space of half an hour there seemed to be a difficulty in establishing the circulation through the lungs. His respiration was uneasy, and accumulated mucus in the larynx distressed him; his face was for some time very pallid, and afterwards slightly livid. Finally, the important functions of circulation and respiration were performed with freedom. During the first forty-eight hours, he seemed to enjoy the most perfect health: his countenance was lively and ruddy, his skin warm, the meconium and urine were properly evacuated; he took the breast eagerly, and slept easily. On the night of April 1st, his nurse consulted me for a difficulty in his breathing. His respiration, indeed, was remarkably quick, but the temperature and aspect of his skin were natural, and he seemed free from pain. He was undressed to admit of a more particular examination. The action of the diaphragm was unusual, and at each contraction, which was very frequent, it forcibly bent inwards the margin of the thorax. The pulsations of the heart were too strong. Nothing was done, because the indications were not clear. He slept quietly the greater part of the night, but, at an early hour the following morning, I was called to him. His cries expressed the distress he then suffered. The diaphragm laboured excessively, and the whole line of its attachment was marked by its vehement action; the heart thumped against the ribs, the pulse at the wrists could not be felt, the skin was pallid and cold. He was immersed in warm water until his cheeks flushed, and then wrapped in flannel. The circulation on the surface was restored, and his distress was mitigated. It appeared that his sufferings had been increased by a distention of the stomach; for after his mother's milk began to flow, at each time that he sucked, his distress became greater, especially the last time, which immediately preceded the violent exacerbation just described. After the use of the warm bath, his skin never became pallid as before, but remained somewhat cold, for the blood lingered in the cutaneous vessels, and his countenance was slightly livid. His muscular powers faded, and his limbs fell. Previous to the disturbed state of respiration, his strength had been unusually great for that of an infant, but now he had not power even to embrace the nipple, although he would make the effort. The labour of the diaphragm ceased, his respiration became more and more feeble, his sensorium during the last few hours was torpid, but he died without convulsion. His death happened seventy-nine hours after birth, and about thirty after the respiration was affected.

"*Dissection.*

"*Dissection.*—The heart, situated naturally, was distended in the utmost degree with blood. Blood was extravasated under the pericardium, and very extensively into the cellular texture of the lungs, but there was no effusion into the cavities of the chest. The heart consisted of an auricle, a ventricle, and a single artery. The auricle was divided from its appendix more distinctly than it is in the natural structure, by an intermediate septum, which, however, gave a free passage to the blood through a large central aperture. The venæ cavæ opened into the auricle, and the four pulmonary veins into the appendix. There was only one ostium ventriculi. The ventricle was single, and had a valve, which, although it was neither tricuspidal nor mitral, more nearly resembled the former than the latter. From the ventricle, one artery, the aorta, furnished with semilunar valves, arose. Its two first branches were pulmonary, very large, and situated close to each other. The third branch was still larger; it came off at a right angle from the aorta, and gave origin to the arteria innominata, the left carotid, and left subclavian arteries. It also sent down a single artery to the heart, which served instead of the coronary arteries. The continuation of the trunk had the usual appearance of the descending aorta. At the origin of the pulmonary branches, the aorta was considerably contracted in its diameter; its coats were separated by blood which had been extravasated between them from the vasa vasorum, and were also thickened; the inflammation extended along its internal coat towards the heart, and its valves were excessively red. All this was evidently recent, and probably caused by the increased current of blood through the pulmonary branches, the distention of which seemed to have impeded the circulation through the aorta, by making a kind of valvular process at its base. In consequence of such obstruction, too much blood was sent through the pulmonary branches, more was returned to the heart than it could eject, the artery inflamed at the obstructed part, the circulation was thus more and more impeded, till the cellular texture of the lungs was filled with blood, and the overloaded heart ceased to act.

"The abdominal viscera were in a natural condition; the brain was not examined."

This case is illustrated by a neat plate containing three figures.

"I. 1. *b. One Pulmonary Branch from the Aorta.*"—This case is related by Mr. Standert in Phil. Trans. vol. xcv. p. 228, and the heart is preserved in the museum of Dr. Ramsbotham.

"I. 1. *c. Heart transposed. The Aorta and Pulmonary Artery branching from a common Trunk*"—An account of this very interesting case, illustrated by figures, is communicated by Mr. Wilson in Phil. Trans. vol. lxxxviii.

"I. 2. *Imperfect Double Heart.*"

"I. 2. *a. Unclosed Foramen Ovale.*"—This variety of malformation is not rare, nor always attended with the inconvenience, distress, and fatality, which usually denote imperfect structure of the organ. The author dissents from the opinion of Mr. Allan

Burns that it is productive of dyspnœa. Dyspnœa frequently accompanies old age; but some persons in advanced age, who have died of some other complaint, and in whom the foramen ovale after death has been found pervious, were not affected with dyspnœa.

"I. 2. *b. Dilated Foramen Ovale, or Imperfect Septum Auricularum.*"—The author considers this variety rare, and does not appear to have seen an instance of it.

"I. 2. *c. Dilated Foramen Ovale, with an open Ductus Arteriosus.*"—A case of this affection is described by Mr. Spry, in vol. vi. of the Memoirs of the Medical Society of London; and by Mr. A. Burns, in a work on Diseases of the Heart. Dr. Farre also states the following interesting fact. "On the 4th of November, 1813, Mr. English favoured me with an opportunity of examining a case of this malformation. We found the heart of its proper size and figure, its respective cavities being only proportioned to each other; but the valve of the foramen ovale was so very imperfect, that a free communication between the auricles existed. The ductus arteriosus was open, and larger than natural. The pulmonary artery was proportionally larger, but its right and left branches were of their proper size. The liquor pericardii was increased, the other cavities of the chest were free from serum, and the appearance of the lungs was natural. In the abdomen we found the liver overcharged with blood, its gall-bladder, cystic, hepatic, and common ducts, preternaturally contracted; but no other morbid appearance."

Mr. English's statement of the previous history of the case, as related by Dr. Farre, is as follows.

"Mrs. S. was delivered of a girl, on the 15th of October, 1813. At her birth nothing very remarkable was observed. She cried faintly for a few minutes, seemed rather weak, and her skin and eyes were somewhat yellow. The bowels were freely opened by castor oil. An occasional threatening of suffocation when she sucked, unusual quietness, and perpetual drowsiness, were remarked during the first week. In the course of the second week, she had fits of crying, generally in the evening, and her breathing was very remarkable. She would take a deep and long inspiration, sobbing once or twice during the time, and afterwards breathe very quick. Presently, the inspirations would be short, and the expirations uncommonly long, until she was roused with a sort of convulsive sob, attended with a slight crowing noise. This peculiarity in the respiration was manifested chiefly after sucking or crying. The paroxysm being over, she would fall asleep, and breathe easily, perhaps more quickly than natural, but start frequently. On the fourteenth night the fit of crying was more severe than on any former occasion, and for several moments the breathing was suspended, the lips becoming black, when a strong convulsive effort with a deep sigh restored animation. This took place repeatedly for about an hour, but afterwards the night was passed quietly. On the fifteenth and sixteenth days, the breathing became more and more disturbed; but the evening paroxysm of the seventeenth

seventeenth was thought to be somewhat less violent than the preceding ones, and the night was passed more comfortably. On the eighteenth morning the child took the breast with less suffocation than usual. The skin and eyes remaining very yellow, and the fæces deficient in bile, a grain of the submuriate of mercury, and four grains of rhubarb, were given at four o'clock in the afternoon. The child slept about an hour, awoke, and vomited a part of the powder, was soon afterwards apparently in much pain, and screamed violently. In this paroxysm, the breathing was frequently suspended for more than a minute, the lips were black, and the eyes fixed. A medical gentleman in the neighbourhood administered a dose of castor oil, some assafœtida, &c. but, at eight o'clock, when Mr. English saw her, she appeared to be dying. The extremities were cold, the countenance cadaverous, the lips black, the breathing by short convulsive inspirations and long groaning expirations, with now and then a sigh. On putting her into a warm bath, it was surprising to see the improved state of the respiration; the expirations being assisted by gentle pressure on the abdomen and ribs. This treatment having been continued for half an hour, she was wrapped in warm flannel, and seemed to sleep for an hour, when the breathing gradually got worse, and all the former train of symptoms returned. The warm bath was again resorted to, with the same benefit as before; but, on taking the child out of the bath, she soon ceased to breathe if left to her own efforts. He therefore kept his hands constantly on the thorax and abdomen, and by assisting the expirations, prolonged her life for about two hours. For ten minutes together she sometimes lay without the least appearance of life, when a strong convulsive action of all the muscles of the thorax and abdomen, with a deep sigh, and several catching sobs, renewed the circulation. Then the colour would return to her lips; she would stretch her limbs, and open her eyes. The last struggle of this kind took place a quarter of an hour after he supposed that she was dead. He never could feel the pulsations of the heart, although he frequently examined the region of that organ. The pulsations of the radial arteries, he once observed, were synchronous."

(To be continued.)

Memoire sur le Vomissement. Par M. MAINGAULT, Docteur en Medicine, &c. pp. 20.

MR. MAGENDIE's Experiments on Vomiting have been already made known through the medium of this Journal. Surprised to observe they deprived the stomach of the power of contraction during that action, M. Maingault has undertaken a series of curious experiments, which are the object of the present memoir, and the results of which differ essentially from those obtained by the ingenious physiologist in question.

The experiments of M. Maingault seem at first to prove that vomiting takes place independently of the abdominal muscles and

of the diaphragm, organs which, according to Mr. Magendie, are the sole agents of this phenomenon. We shall not at present decide how far apparently contradictory facts of the two physiologists are capable of being reconciled; but the labours of M. Maingault will be received with pleasure by those who are really interested in the progress of physiological science.

Our author having opened the belly of a dog, and removed the abdominal muscles, produced strangulation of the intestine, and the animal vomited several times. In other experiments, *the diaphragmatic nerves having been divided*, and the strangulation of the intestine having been effected through a little opening in the abdomen, the vomiting took place. In other dogs, the author divided the diaphragmatic nerves, made the section of the abdominal muscles, and removed a portion of the diaphragm *(jusqu'au centre phrenique)*. He then strangled the intestine, and vomiting was produced when the dog swallowed.

A very remarkable fact, and worthy the attention of physiologists, is, that, by an injection of an emetic solution into the veins, vomiting was produced in animals from which the author had previously removed the abdominal muscles and diaphragm,—an experiment which indisputably proves that medicines of this class do not act upon the *abdominal* muscles, as we were led to conclude from the experiments of Mr. Magendie.

Reponse de G. Th. MARQUAIS, *Chirurgien, au Memoire de* Mr. MAGENDIE, *sur le Vomissement, et sur le Rapport fait a l'Institute, par* Messrs. CUVIER, PINEL, HUMBOLDT, *et* PERRY. pp. 17.

THE Memoir of Mr. Magendie on Vomiting was scarcely brought to light, when Mr. Marquais entered the lists against him in the present pamphlet. Our author falls first upon Mr. Magendie, and then on the Commissioners of the Institute, and goes so far as to insinuate that both the Memoir and Report are the production of one pen.

Mr. Magendie, he observes, in the first place, is wrong in maintaining that towards the end of the 17th century physiologists and physicians were unanimous in considering vomiting as the effect of a convulsive contraction of the *stomach*, since Haller and Wepfer have spoken of the action of the diaphragm under these circumstances.

2. It is untrue that many authors of the fifteen last years of this century, and of one half of the following, was entirely passive in vomiting. Mr. Marquais, however, has *forgotten* to supply the proof.

3. Mr. Magendie is wrong in maintaining that Senac, Van Swieten, and Schwartz, have adopted the opinion of Chirac on the passive state of the stomach, as these authors contain many proofs in their writings to the contrary.

4. The author of the memoir said, Lieutaud combats the opinion of

of Chirac by reasoning rather than by fact. Mr. Marquais finds in Lieutaud a fact which supports his reasoning.

5. Wepfer *did* distinguish the spasmodic or convulsive movements of the stomach from the permanent contractions which are produced by the action of certain chemical substances.

6. It is not a few experiments of Haller which have induced that physiologist to embrace his system of vomiting. They are the numerous observations made by Wepfer, and those of Fælix his pupil, made in his presence, and his own.

7. He accuses the Commissioners of partiality in disputing the experiments of Haller, while those of Mr. Magendie are considered well authenticated.

8. The first experiment of Mr. Magendie does not differ, in the author's opinion, from those of Bayle and Chirac.

9. Wepfer remarked *before* Magendie that the stomach filled with air during vomiting.

10. From the year 1668, Eleholz injected emetic substances into the veins of animals to excite vomiting.

11. Mr. Magendie, in his experiments, has demonstrated that it is not by the action on the stomach that the emetic occasions vomiting. M. Marquais agrees with him, but insists that the effect is produced by its operation on the œsophagus, and not on the diaphragm and abdominal muscles; and explains in the same manner how vomiting takes place when the pig's bladder is substituted for the stomach.

12. Mr. Magendie is not the first who made the section of the abdominal muscles, and preserved the peritoneum, to see if vomiting could be effected. The same experiment may be found, says M. Marquais, in a dissertation printed in 1698.

Other remarks of the same kind, and no doubt dictated by the same motive, are to be found in this pamphlet, but, out of compassion to the public, we shall cease to quote him. Whoever will take the pains to examine the Memoir on Vomiting, published in our 30th volume, will discover that the author of the paper under consideration principally labours to prove what is admitted by his opponent (if we can without insult to Mr. Magendie adopt the term). This gentleman does not take to himself the credit of entire originality, but certainly deserves that of having instituted a most interesting series of experiments, which put the question upon a firmer and more indestructible basis than it had ever possessed before. We know not who this M. Marquais is, but he has given us no proof either of the excellence of his temper or the soundness of his judgment. Mr. Magendie's reputation is too firmly established to be affected by petty quibbles, the consequences of which must of necessity revert to the snarler that gives them birth. Phædrus will supply M. Marquais with a parallel, and we trust he will be improved by the lesson; we refer him to the fable of the Viper and the File.

Morduciorem qui *improbo dente* adpetit
Hoc argumento se describi sentiat, &c.
Cease, Viper, you bite against a file.

MEDICAL

MEDICAL AND PHILOSOPHICAL INTELLIGENCE.

At a meeting of the Westminster Medical Society, Mr. Earle mentioned a case of retention of urine, which had been relieved by an enema of an infusion of Nicotianum. The following were the particulars:—A man had been for some time affected with strictures, but had always been able to void his water in a small stream, until one morning, when he found that none would pass, notwithstanding his bladder was full, and his desire to void urine very urgent. He immediately applied to a neighbouring chemist, who bled him largely, and made several attempts to pass a catheter, and used much force. Not succeeding in his object, he called in Mr. Earle; the patient was in great distress from the distension of the bladder, and bleeding profusely from the urethra. He was ordered to sit in warm water, a clyster of water-gruel was administered, and the Tinctura Ferri Muriate was prescribed in doses of gtt. xv. every ten minutes. This plan was persevered in for four hours without any apparent benefit. Mr. E. now attempted to pass a bougie, but found that it passed out of the urethra when about seven inches down, and took a wrong direction. The bougie was immediately withdrawn, and an injection was directed to be thrown up, consisting of an infusion of tobacco, of the strength of one drachm to eight ounces of boiling water. The effect was very powerful and decided; the patient became faint and sick; his pulse sunk, and his whole body was bathed in perspiration; in a few minutes the urine flowed from him in a small stream. He was directed to keep very quiet, and to bathe the perineum often with warm water. There was no return of the retention, and, after some time had elapsed, bougies were introduced twice a-week, and the strictures much relieved. Mr. Earle further mentioned, that he had resorted to the same remedy in three other cases of obstinate retention, in which no instrument could be passed, in all of which the Enema Nicotianæ had proved eminently useful.

At one of the recent meetings of the Medical Society of London, Oil of Turpentine was strongly recommended, as being almost a panacea for *acute* Rheumatism. The formula in which it was administered with so much success is—Ol. Terebinth. gtt. xx. Decoct. Cinchon. ℥ifs. 4tis. horis. The use of the lancet and purgatives, we believe, were generally premised. No sensible operation ensued from the medicine; but the patients were quickly relieved of the complaint.

A case has been communicated to the Medico-Chirurgical Society, of the mechanical cure of that species of incontinence of urine occasioned by sloughing of the lower surface of the bladder and vagina, consequent to parturition. The contrivance employed consists in a tube of elastic gum passed into the vagina, upon which

which is fixed a piece of sponge corresponding in size and situation with the opening into the bladder; the sponge is then introduced into the aperture, which, by the pressure of the elastic tube, is closed so as to allow no passage for the flow of urine through it. By means of a female catheter, the water is very frequently drawn off, or the bladder kept constantly emptied; the urine thus diverted into its natural channel, no longer prevents the healing of the ulceration, which gradually takes place. As the sponge absorbs part of the urine, the surface which is applied to the ulcerated margins of the aperture should be smeared with ointment, or some substance capable of keeping the urine from them. Where the incontinence arises from paralysis of the sphincter urethræ, of course this practice is not likely to be beneficial.

The Committee of Medical and Physical Science of the Society of Emulation and Encouragement of the Arts and Sciences at Liege, have offered a Gold Medal to the author of the best Dissertation on indigenous Vegetable Poisons. Four questions are submitted to the notice of the candidates: 1. What are the principles in which the deleterious properties reside? 2. What is the mode of action which they exercise on the animal economy? 3. What are the organic lesions which they produce? 4. What are the best means of obviating their bad effects?

The same Committee offers a Silver Medal to the author of the best Medical Topography of a canton in the department of the Ourthe. Memoirs to be addressed, free of postage, to M. De Jaer, Liege.

Mr. Beclard has made some observations in the Bulletin de la Faculté de Medicine, which seem to prove that the fœtus breathes the liquor amnii. When he first entered upon the investigation of this question, he was not aware that it had occupied the attention of any inquirers since the time of Haller; and was first led to the consideration of it by the opinion of Rœderer, and by that promulgated by Professor Dubois, in his lectures on midwifery. He has since become acquainted with the inquiries prosecuted at Copenhagen by Winslow, Scheele, Riegel, Heroldt, Abildgard, and Wyburg, but his conclusions differ in some respects from theirs.

If we examine a still-born fœtus, we may easily convince ourselves by dissection, that the trachea and the bronchi are filled with a fluid resembling the liquor amnii. Fœtuses which are born feeble, and with the face upwards, evacuate a large quantity of liquid during the first moments in which they breathe the air; they are frequently obliged to be placed upon the side, in order to favour this evacuation; and sometimes it is necessary to clear the mouth and the pharynx. When the infant is strong, and is born with the face upwards, it frees itself from this liquid in a few instants. Mr. B. once had occasion to perform the Cæsarian operation upon a woman who had just expired; the fœtus was also dead, and had the mouth, the pharynx, the trachea, and the

bronchi, filled with water. He has several times opened the pregnant female of different animals; after having cut into the uterus, he tied the neck of several fœtuses, whilst still enclosed in the amnios, and on examining the trachea and bronchi, it was found then filled with a liquid similar to the liquor amnii. To clear up any doubts that might remain upon the subject, water coloured black by the addition of ink was injected into a small opening in the amnios of a bitch; after a few moments, he tied the neck of the fœtus, which was still living, and he found the black fluid in the trachea and the bronchi.

In cases of presentation of the feet, every practitioner in midwifery has undoubtedly seen and felt the well-marked motions of inspiration which are made by a vigorous fœtus, when the head, the neck, and the superior members, are still contained in the uterus and vagina.

When the uterus of the pregnant female of any animal is laid open with caution, the motions of respiration, by which he means the opening of the mouth, and dilatation of the nostrils, synchronous with the elevation of the parieties of the thorax, may be distinctly observed through the membranes and the liquor amnii: they are repeated at regular intervals; they are in general slower than the motions of respiration in animals of the same species breathing the atmosphere; they become more frequent as the circulation between the mother and the fœtus becomes imperfect by the gradual contraction of the uterus; they bear a striking resemblance in general to the rare and deep respiratory motions of fœtuses which are born in a state of weakness, and approaching to suffocation. It is yet uncertain whether, besides the mechanical phenomena of respiration, which evidently exist in the fœtus, particularly when any obstacle is opposed to the circulation through the funis, any chemical action takes place between the liquor amnii and the blood, which passes through the lungs, in quantities proportionally greater as the period of birth approaches.

With respect to the introduction of the liquid into the intestinal canal, Mr. B. possesses some facts in addition to those by which Haller has established this opinion. He examined some meconium with Professor Chaussier, and found in it hairs similar to those which are met with upon the skin of the fœtus, in the latter part of its existence in the uterus. He dissected the body of a fœtus in which the intestinal canal was in one part obliterated; the superior part only contained meconium, the inferior contained only a sweetish colourless mucus.

The Gazette de France gives some curious particulars of experiments made with a new diving machine by Mr. Melville the inventor. He descended twice in the Seine, near the Pont Royal, to the depth of from 10 to 20 feet, and passed 56 minutes at the bottom. He took with him two swans, two ducks, and some bread and wine. He let loose the aquatic animals while under water, went from the Pont Neuf to the Swimmer's Aquatic School, and

came out dressed as usual, without being in the least wet. The machine does not resemble any thing of the kind hitherto employed. It is neither a barrel or a bell, but has rather the form of an egg. It is not bulky, contains only five cubic inches of air, so prepared that pressure can do it no harm; but it is kept pure and fresh. Mr. M. has taken with him cats, rabbits, dogs; but the latter cannot bear this kind of air longer than five minutes, as they go mad in it; but he declares he could stay half a day in his machine under water, without the slightest inconvenience. He has the use of all his limbs, and can do what he pleases—saw wood, bore gimblet holes, and pick up the smallest objects. His pulse rises from 120 to 160, and he feels from it an agreeable sensation, a kind of electrical effect.

On the establishment of peace between France and this country, a Frenchman, by name PRADIER, advertized a certain cure of gout by his newly-discovered medicine. Curiosity led us to inquire into the particulars of his secret. It consisted of a poultice of linseed meal, sprinkled with a spirituous liquid, and made sufficiently large to cover the parts affected. It appears, from the French journals, this remedy had then been purchased by their government, and the following farrago is the certified prescription.

Balsam of Mecca, six drachms; red bark, an ounce; saffron, half an ounce; sago, an ounce; sarsaparilla, an ounce; alcohol, three pounds: mix for a tincture. About ℥ ij. of this liquid is diffused over the surface of a *hot* poultice, of a large size, and applied to the parts. It may be changed every twelve hours.

The use of cataplasms in arthritic complaints is not a new practice. RIOLAN (the father) recommends from GALEN one made of fænugreek powder, honey, and vinegar, which in three days produces wonderful effects "fiat hoc triduo & miraberis effectus." Emollient applications have always had their advocates; but, as it has been hinted by some, and especially by Baglivi and Barthez, that they leave the parts in a state of greater laxity, they have not been very universally employed. The latter of these authors, in his Treatise on Gout, has collected a great number of analagous formulæ, and advises the choice of those which assist the transpiration of the part.

The Commissioners of Secret Remedies in France have had several specific poultices presented to them for the cure of gout. One of them is made with the meal of pease, which very nearly approximates to our *pease-pudding*. Another, for the soles of the feet, is made with turnips, rice, and rye flour, impregnated with different saline and mineral substances. One individual proposes nettles boiled in wine. It is not uncommon on the continent to use large and thick cataplasms, with tincture of saffron or guaicum sprinkled on them.

If there be any virtue in Mr. Pradier's remedy, we suspect the whole is to be ascribed to the alcoholic spirit and poultice, which

are not unlikely to be serviceable in some cases. The sum of 6000 francs was agreed to be given to him for its publication.

In a former Number we noticed the experiments of M. BERTRAND, which tended to prove that charcoal was an antidote to certain mineral poisons. These, however, have been repeated by M. ORFILA, who authorizes the editor of the Gazette de France to announce his intention of refuting them in his ensuing publication on the subject of Poison.

Cancerous Ulcers of the Nose cured by Rousselot's Powder.—A woman, 66 years of age, had for seven years a carcinomatous ulcer, from the basis of which arose fungous excrescences of a horny nature. M. PETIT covered the surface with the powder, (consisting of oxyde of arsenic, 1 part; dragon's blood, 8 parts; and 16 parts of sulphuret of mercury.) The eschar produced by it fell off at the end of three days, and exposed a red and inflamed surface. After suppuration was established, the inflammation abated, and the powder was applied a second time. The eschar now formed fell off in four days, when the disease required nothing but simple cerate for its complete cure. Another case of the same kind was cured by three applications.

The boy we mentioned in one of our former Journals as the subject of Elephantiasis in St. Bartholomew's, now labours under measles, a further proof of the justice of Dr. Christie's remark, that this dreadful disease, in its worst form, is no protection against contagion.

Mr. SANKEY has published some Observations on Phlegmatia Dolens. He has never seen it follow the first labour, or attack the same patient twice; two cases were in young women, not after parturition: both were severe, and well marked; both had obstructed menses, and one had a suppression of urine. One well-marked case existed in a man 60 years old. In Dr. Wyer's, and in most of the cases described by Dr. Hull, Dr. Ferriar, and Dr. White, it was confined to one leg only. Most of the patients seen by Mr. S. have had both legs affected, not at the same time, but, after going through the progress in one, the other becomes affected; and (unless prevented by the application of blisters) goes through the same stages, and takes the same time as the first. He has always found gentle laxatives useful and necessary, even when there is diarrhœa. To ease the pain, small doses of opium with antimony have been given; every other internal treatment has been directed to palliate symptoms. As there is always considerable debility, accompanying or following—generally want of appetite, attended with a quick and feeble pulse,—he gives some kind of tonic as soon as the stomach and state of fever would admit; but all these seem only auxiliaries, and not very important, except opening the bowels, and moderate doses of opium. What

he

he considers to be specific, is a blister applied to the calf of the leg immediately upon discovering the complaint. When the symptoms have made some progress, it is often some time before the complaint can be subdued, though every blister is seen to relieve the pain, and, when thus completely formed, it often requires several blisters. The first is applied to the calf of the leg, as the pain is generally most severe in that part, and there is less fear of its not healing than if applied lower. If required, they are repeated every two or three days, not at the same place, but higher or lower, according to the seat of the pain. With every attention, this complaint often leaves considerable weakness in the leg most affected, requiring bandage or laced stocking. Though it is often a tedious and painful complaint, he has never seen it fatal.

Mr. HARTTE has related a case of Hemiplegia, treated with Tincture Lyttæ, and cold Shower-bath. —— Hope, a private soldier in his Majesty's 1st West India Regiment, (while at Trinadad,) was admitted into the hospital on the 29th June 1812, with Cachexia Africana, for which bark, steel, and other tonic medicines were given. He appeared to be recovering; but, on the morning of the 18th of July, it was found, that, from paralysis, he had lost the power of his right side; that he appeared to have no sense of feeling in it, or the extremities of that side; his articulation was scarcely to be understood; he seemingly did not suffer pain, yet he would frequently with his left hand take hold of his tongue, as if with a view of squeezing it smaller. Blisters were applied between the shoulders, along the vertebræ of the neck, as well as the region of the sacrum; asafœtida and other antispasmodics were employed with success. On the 29th July, five drops of the tinct. lyttæ were given three times a-day, increasing the dose one drop daily.

On the 3d August, ten drops produced ardor urinæ: the medicine was discontinued for one day, and rice-water ordered for common drink, and the region of the bladder was fomented. The following day, (5th August,) he commenced the tincture with ten drops (ter in die). On the 16th August, he was sensible when any part of his side or extremities was touched, and his articulation began to be more distinct; on the 20th August he could stand with the assistance of a stick. On the 1st September, the cold shower-bath was ordered every morning. When at 37 drops per day, he could make some steps without the stick: this quantity was given until the 20th September, when he was so convalescent, that it was discontinued, and the cold shower-bath only was used. On the 4th October he was discharged in perfect health.—*Edin. Journ.*

Protrusion of the Brain.—Dr. Sibley, of Union, has communicated a case of fractured cranium, in which the dura mater was wounded and a small portion of the substance of the brain lost. The patient was trepanned by Dr. Brown of Waldoborough; he was delirious

delirious a short time after the operation, and on the fourth day the brain began to protrude from the wound and continued to increase to the height of an inch, at the same time suppurating freely. Being lessened to half its size by the suppuration, pressure was applied, which in a few days reduced it wholly, and the boy soon recovered his health of body and mind.—*New England Journal.*

Spina Bifida.—Dr. Sewall of Ipswich informs us of a case of spina bifida, which, at the age of two years was accompanied with a tumour at the fontenelle, which by pressure could be made to disappear, while the tumour on the spine would be proportionately enlarged. In consequence of the solicitation of the parents, this tumour was punctured and on its being emptied, that at the fontenelle also subsided. Convulsive respiration immediately succeeded the operation, in six hours spasms, and at the end of twelve the child expired.—*New England Journal.*

Foreign Substance in the Lungs.—Dr. Buck, of Wilmington, has given an account of a case, in which a boy about two years old was suddenly seized with symptoms of a severe pulmonic affection, which continued occasionally by severe, suffocating paroxysms to reduce his strength for above three months; when he was so exhausted as to be continually threatened with death. A violent fit of coughing and suffocation induced his mother to give him, according to common practice, a smart blow on the back, which had the effect of driving a water melon seed from the trachea; the patient was relieved and recovered.—*New England Journal.*

Dr. Davis, Physician to the Queen's Lying-in Hospital, will commence his second winter Course of Lectures on the Theory and Practice of Midwifery, and on the Diseases of Women and Children, on Wednesday, January the 4th, 1815.

Dr. Adams is preparing an Illustration of Mr. Hunter's Doctrine concerning the Vitality of the Blood, in answer to the Edinburgh Review of Mr. Abernethy's Lectures.

A Statement of the early Symptoms which lead to the Disease termed Water in the Brain, with Observations on the necessity of a watchful Attention to them, and on the fatal consequences of their Neglect; in a Letter to Martin Wall, M.D. by G. D. Yeats, M.D. of Trinity College, Oxford, of the Royal College of Physicians, London, late Physician to the Infirmary and Lunatic Asylum of the County, and Physician to his Grace the Duke of Bedford; will shortly be published.

Remarks on the Symptoms and Treatment of the Diseased Spine previous to the period of Incurvation, illustated with two Engravings, by Thomas Copeland, M.D. Fellow of the Royal College of Surgeons, and Assistant-surgeon to the Westminster General Dispensary, is also in the press.

METEO-

METEOROLOGICAL REGISTER.

From October the 25th, to November the 25th, 1814.

Kept by C. BLUNT, Philosophical Instrument Maker, No. 38, Tavistock-Street, Covent-Garden.

Moon.	Day.	Wind.	Barometrical Pressure. Max.	Min.	Mean.	Temperature. Max.	Min.	Mean.	
	26	NW	29·65	29·51	29·61	51	37	43·3	Rain
	27	NW	29·80	29·75	29·775	50	37	42·6	Fair
	28	NW	29·86	29·83	29·84	51	36	43	Rain
○	29	SW	29·78	29·67	29·727	52	37	44	Cloudy
	30	SE	29·86	29·84	29·85	51	34	43	Fair
	31	SW	29·90	29·89	29·892	52	43	48·6	Foggy
	1	ESE	29·94	29·93	29·932	50	42	46	Cloudy
	2	NE	29·97	29·96	29·965	46	38	43	Cloudy
	3	NE	29·92	29·88	29·895	47	35	41·3	Cloudy
	4	E	29·84	29·84	29·84	48	35	39·6	Cloudy
◑	5	E	29·78	29·74	29·75	47	37	39·6	Cloudy
	6	NE	29·74	29·74	29·74	48	36	39·6	Fair
	7	N	29·74	29·50	29·605	50	33	40	Fair
	8	NW	29·38	29·31	29·342	47	32	38·3	Squall of rain, hail, & thund. at 4 P.M.
	9	W by N	29·53	29·49	29·506	48	31	37·6	Cloudy, snow, & hail, P.M.
	10	NW	30·12	30·—	30·056	44	30	35·6	Frost. Fair
	11	W	30·24	30·11	30·162	47	33	39	Rain
	12	NW	29·90	29·79	29·863	48	34	44	Rain
	13	N	29·84	29·84	29·84	48	37	44·6	Cloudy
◐	14	W	29·83	29·75	29·79	52	38	46	Rain
	15	W	29·85	29·60	29·746	55	45	50	Rain
	16	W	29·71	29·34	29·586	57	36	46·3	Fair
	17	NW	30·—	29·99	29·995	56	42	47·6	Stormy Wind Fair
	18	W	29·75	29·64	29·713	56	44	51	Rain
	19	NW	29·57	29·44	29·775	49	33	44·6	Fair
	20	NW	29·5	29·5	29·5	45	35	41	Rain
	21	NW	29·65	29·6	29·87	45	25	36·3	Clear
	22	NW	29·69	29·69	29·69	35	25	29·6	Clear
	23	NW	29·70	29·66	29·67	44	26	33·6	Fair. Fog.
	24	W	29·80	29·70	29·742	44	32	38·6	Foggy
	25	W	29·64	29·42	29·77	53	40	46·6	Rain

RESULTS.

Mean barometrical pressure of the month	29·654	Mean temperature of the month	42·38 deg.
Maximum 30·24	wind at W	Maximum 57,	wind at W
Minimum 29·31	—— NW	Minimum 25,	—— NW

Scale exhibiting the prevailing Winds during the Month.

N	NE	E	SE	S	SW	W	NW
2	3	2	2	0	2	7	13

	Mean barometrical pressure.	Mean temperature.
From the full moon on the 28th Oct. to the last quarter on the 7th Nov.	29·843	50·77
—— last quarter on the 7th, to the new moon on the 12th	29·734	38·1
—— new moon on the 12th, to the first quarter on the 20th	29·788	46·76

MONTHLY

MONTHLY CATALOGUE OF MEDICAL BOOKS.

MEDICO-CHIRURGICAL Transactions, published by the Medical and Chirurgical Society of London. Volume V. 8vo.; plates; 18s.

Pathological Researches. Essay I. on Malformations of the Human Heart; illustrated by numerous Cases, and five Plates, containing fourteen Figures; and preceded by some Observations on the Method of improving the Diagnostic Part of Medicine. By J. R. Farre, M.D. 8vo. 7s.

A System of Operative Surgery, founded on the Basis of Anatomy. By Charles Bell, Esq. Surgeon to the Middlesex Hospital, &c. &c. The second Edition; 2 vols. 8vo. 1l. 18s.

A Dissertation on Gun-Shot Wounds. By Charles Bell, Esq. Surgeon to the Middlesex Hospital, &c. &c. 8vo. 10s. 6d.

Observations on the principal Diseases of the Rectum and Anus, particularly Structure of the Rectum, the Hæmorrhoidal Excrescence, and Fistula in Ano. By Thomas Copeland, Esq. Second Edition, considerably enlarged. 8vo. 7s.

Appendix to J. Callow's Modern Catalogue, containing the new Works published during the present Year; to which is added, a large Collection of Foreign Books lately imported, to be sold at reduced prices.

Books imported by J. Callow.

Alibert Description des Maladies de la Peace, observées à l'Hôpital Saint-Louis; et Exposition des mailleures méthodes suivies pour leur traitement grand in fol. pap. vél fig. color. 9 livraisons.

Belloc Cours de Médecine Légale, Theorique et Pratiqué, 8vo.

Mémoires de la Société Médicale d'Emulation. 7 tom. in 8vo. fig. 1798-1811.

Ploucquet, Litteratura, Medica Digesta, sive Repertorium Medicinæ Practicæ, Chirurgiæ, atque rei Obstetriciæ. 4 tom.

Scarpa Traité Pratique des Hernies, ou Memoires Anatomiques et Chirurgicaux sur les Maladies, traduits de l'Italien, par M. Cayol, avec planches, en folio.

Hippocrates Aphorismi et Prænotionum liber Græce et Latiné edante par Bosquillon. Paris, 1814. 18mo.

TO CORRESPONDENTS.

We have found it necessary to curtail several Communications received this Month. We take the opportunity of suggesting, that brevity is one of the perfections of composition, and should always be kept in view where the sense of the writer is not likely to be obscured by it.

The Letter of Chirurgicus savours too much of quackery to be inserted. We strongly suspect its real signature should have been EMPIRICUS OCULARICUS, *and the term* friend to science *might have admitted a corresponding change.*

The answer to Dr. Sutton has been again postponed on account of the the length of the various Communications this Month. Our first duty is to discharge the obligations we are under to our numerous friends, by as early an insertion of their papers as possible.

Communications have reached us from Dr. Mitchell, Messrs. Smerdon, Walker, R. B. H., &c. &c.

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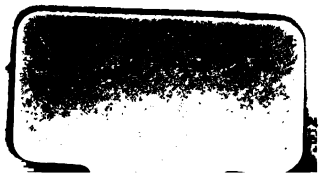
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